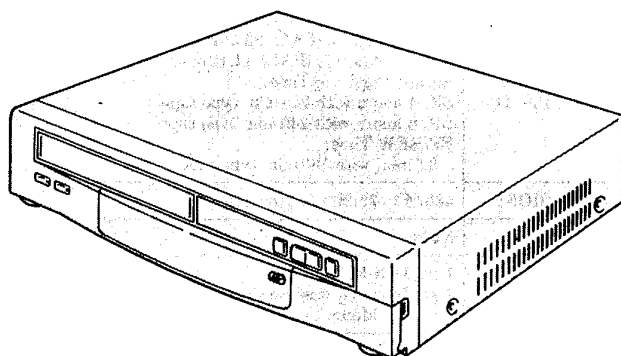


Service Manual

Video Cassette Recorder

General Description**Adjustment Procedures****Block / Schematic Diagrams****Exploded Views / Parts List**
Panasonic **VHS**

PAL NTSC

Hi-Fi HQ**NV-HD70AM****NV-HD77AM****NV-HD90EE****K-MECHANISM****MASTER**

JUL. 6. 1994

持出厳禁**SPECIFICATIONS (NV-HD70AM, 77AM)**

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	SOURCE: 110~240V 50/60Hz	AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	CONSUMPTION: 30 watts (NV-HD70AM) 32 watts (NV-HD77AM)		INPUT: AUDIO IN Connector (Phono type) More than -10dBV (316mV), more than 47kΩ
RECORDING SYSTEM	2 rotary heads, helical scanning system		OUTPUT: AUDIO OUT Connector (Phono type) -8dBV (400mV), Less than 1kΩ
	PAL/NTSC		TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
TV TUNER SYSTEM	VHF I: CH2~CH4 (PAL B/SECAM B) CH1~CH5 (PAL D/SECAM D, KI) CH2~CH6 (NTSC M)	TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
	VHF III: CH5~CH12 (PAL B/SECAM B) CH6~CH12 (PAL D/SECAM D, KI) CH7~CH13 (NTSC M)	TAPE SPEED	SP: 23.39 mm/s (PAL), 33.35 mm/s (NTSC) LP: 11.695 mm/s (PAL), 11.12 mm/s (NTSC) Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
UHF:	CH21~CH69 (PAL G, H, I/SECAM G, K) CH13~CH57 (PAL D) CH14~CH79 (NTSC M) 75Ω terminated		DIMENSIONS
	UHF: CH38 $\frac{1}{2}$ (PAL G, H, I/SECAM G, K) CH25 $\frac{1}{2}$ (PAL D) CH29~CH39 (NTSC M) 73±3 dBμ, 75Ω terminated	WEIGHT	430(W)×96(H)×349(D) mm
RF OUT SYSTEM			5.0 kg
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L'-R' heads)	STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Controller 1 pc. AC Mains Lead 1 pc. AC Plug Adaptor 1 pc. Separate Transformer Adaptor
	INPUT: VIDEO IN Connector (Phono type) 1.0 Vp-p, 75Ω unbalanced		
	OUTPUT: VIDEO OUT Connector (Phono type) 1.0 Vp-p, 75Ω unbalanced		

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

A-6-12

SPECIFICATIONS (NV-HD90EE)

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	SOURCE: 220-240 V AC 50/60Hz	AUDIO	HEAD: 1 Stationary head (Normal Audio) 2 rotary heads (Hi-Fi 2CH)
	CONSUMPTION: 30 watts		INPUT: EURO AV Connector (21 pin) More than -6dBV (500mV), more than 10k Ω
RECORDING SYSTEM	2 rotary heads, helical scanning system		OUTPUT: EURO AV Connector (21 pin) -6dBV (500mV), Less than 1k Ω AUDIO OUT Connector (Phono type) -8dBV (400mV), Less than 1k Ω
TV TUNER SYSTEM	PAL		TRACK: 1 track (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	VHF I: CHR1~CHR5 (SECAM D) CHE2~CHS3 (PAL/SECAM B) VHF III: CHR6~CHR12 (SECAM D) CHM1~CHU10 (PAL/SECAM B) UHF: CH21~CH69 (PAL G/SECAM G. K) 75 Ω terminated		
RF OUT SYSTEM	UHF: CH38 $\pm$ 2 (PAL/SECAM G. K) 73 $\pm$ 3 dB μ , 75 Ω terminated	TAPE FORMAT	VHS Cassette tape (Tape width 12.7 mm)
VIDEO	HEADS: 4 rotary heads 1 pair for SP recording, playback and trick play (L-R heads) 1 pair for LP recording, playback and trick play (L' -R' heads)	TAPE SPEED	SP: 23.39 mm/s (PAL), 33.35 mm/s (NTSC) LP: 11.695 mm/s (PAL), 11.12 mm/s (NTSC) Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
	INPUT: EURO AV Connector (21 pin) 1.0Vp-p, 75 Ω unbalanced	DIMENSIONS	430(W) $\times$ 96(H) $\times$ 349(D) mm
	OUTPUT: EURO AV Connector (21 pin) 1.0Vp-p, 75 Ω unbalanced VIDEO OUT Connector (Phono type) 1.0Vp-p, 75 Ω unbalanced	WEIGHT	5.0kg
		STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. Infra-red Remote Controller 1 pc. AC Mains Lead

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.

Section 3, 4 contains block diagrams which provides you with information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...

Section 5 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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Technical Information

Subject: How to install the VPS DECODER (VW-VPS5E: NV-HD90EE)

1. Do not connect the video recorder to the AC outlet
2. Remove the 4 screws(A) and the Top Panel. (Fig.P1)
3. Remove the 2 screws(B), 3 screws(C) and unlock the tab(D). (Fig.P2)
4. Lift the Main C.B.A. up side down and lie it on the Cassette Compartment. Insert the VPS Decoder. (Fig. P3)

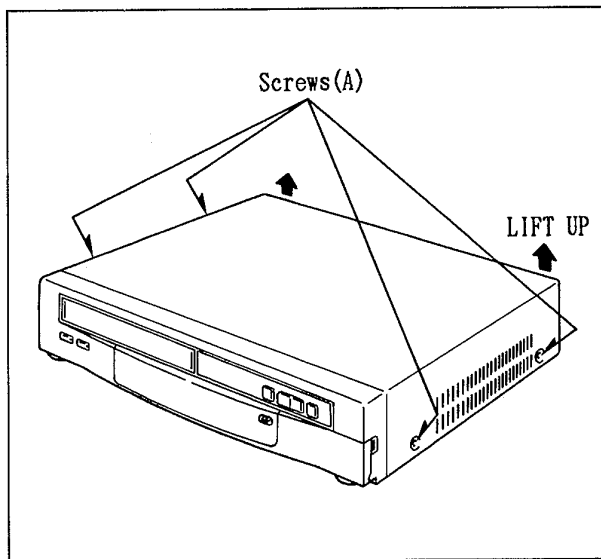


Fig. P1

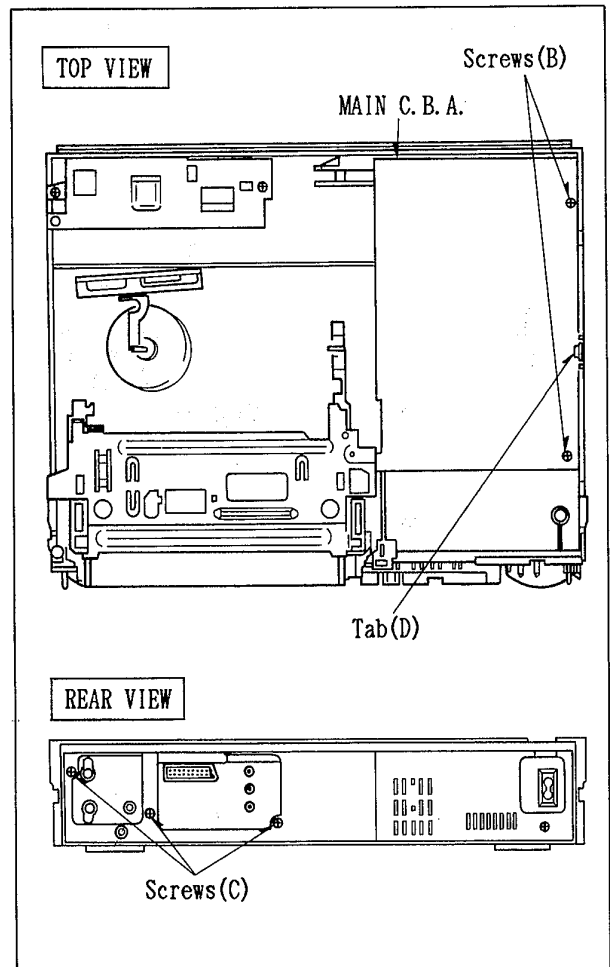


Fig. P2

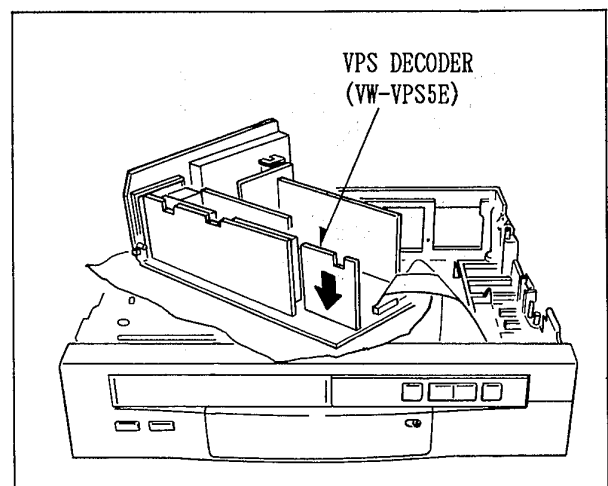


Fig. P3

SECTION 1 GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

<A> MECHANISM SERVICE POSITION

When servicing the K-Mechanism, the Mechanism can easily be fixed by standing the Mechanism up in the Main Frame as shown below to check easily.

In this position, the following services are possible.

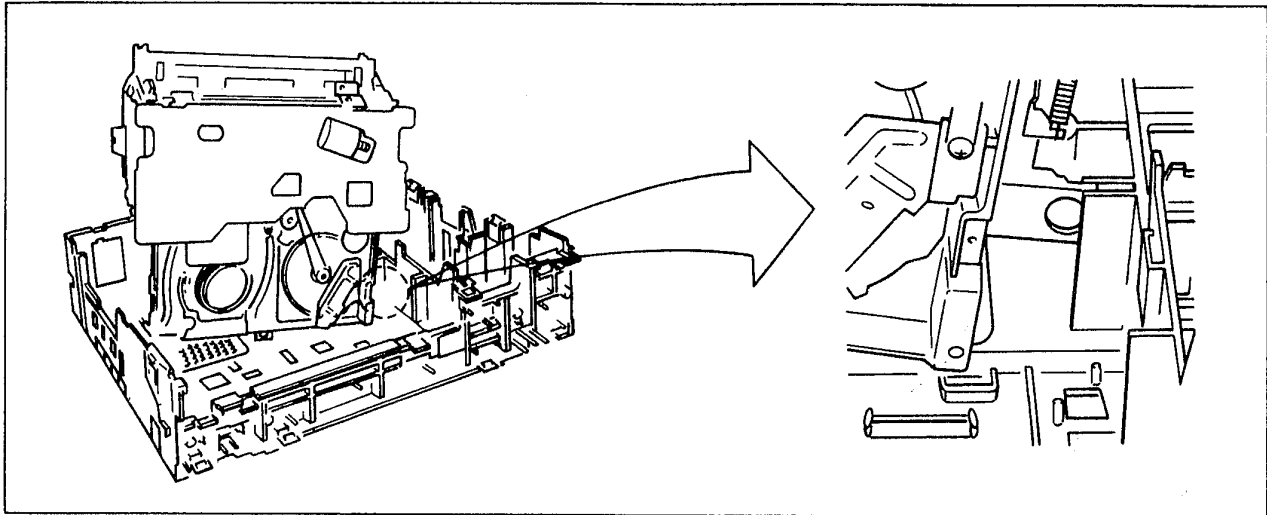


Fig. S1

<A-1> CHECKING OF GEAR PHASE ALIGNMENT CONDITION

- 1) Remove the Mechanism Connection C.B.A.
- 2) Check gear phase alignment condition of Mechanism described on the bottom side of Frame.

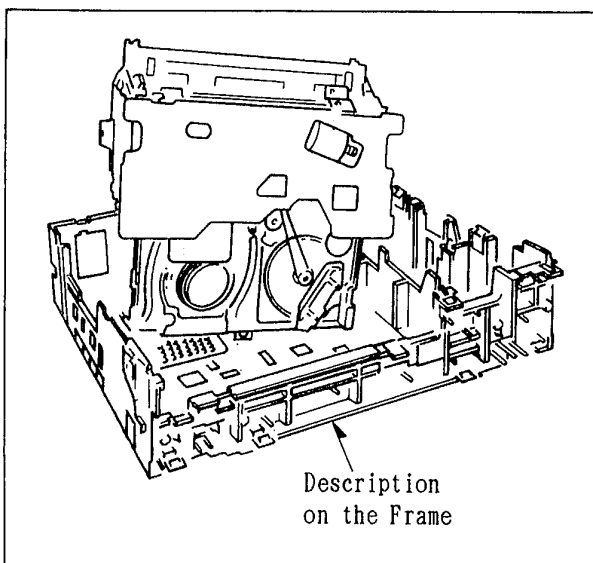


Fig. S2

<A-2> CHECKING OF LOADING / UNLOADING OPERATION

There are 3 methods for checking of loading/unloading operation as follows.

(1) HAND OPERATION

- 1) Remove the Mechanism Connection C.B.A.
- 2) Turn the Worm Gear or the Worm Wheel Gear (Remove the Loading Motor Unit) manually.

(2) BATTERY OPERATION

- 1) Remove the Mechanism Connection C.B.A.
- 2) Connect the Battery (Manganese-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.

(3) SERVICE INFORMATION DISPLAY OPERATION

- 1) Set the Service Information Display mode. (Press the "FF", "REW" and "EJECT" buttons simultaneously.)
- 2) Press the "FF", "REW" and "EJECT" buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)

- 3) In the above Service Information Display mode, the Loading Motor rotates for loading operation when the "PLAY" button is pressed. The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:

Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

<A-3> CHECKING OF REEL GEARS OPERATION

- 1) Remove the Mechanism Connection C.B.A.
- 2) Move the mechanism to "PLAY" position by loading operation. (Refer to <A-2>)
- 3) Turn the "Rotor Unit" to check movement of reel gears.

** TUNER & TV DEMODU C B A.s SERVICE POSITION**

Use the Extention Cables when checking.

PART NO.	PART NAME	PCS.	CONNECTION
VFK0944	5-PIN WIRE CABLE	3	PP7002-PS703 PP7003-PS702 PP7004-PS701
VFK0890	6-PIN WIRE CABLE	1	PP7001-PS704

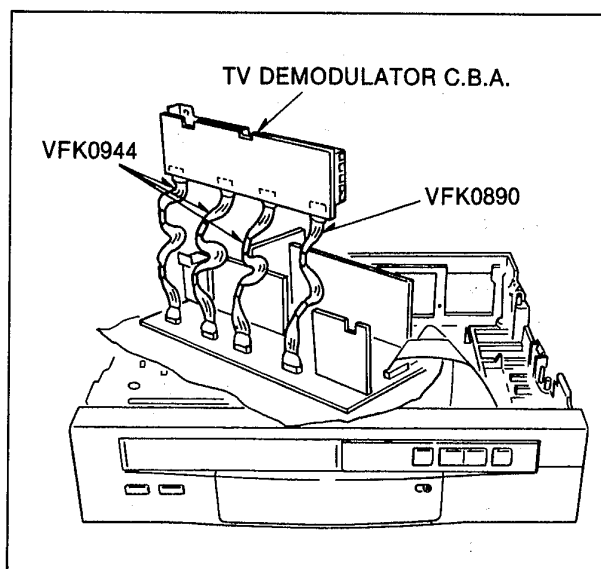


Fig. S3

<C> CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

- 1) Remove the Top Panel.
- 2) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown in Fig. S4.

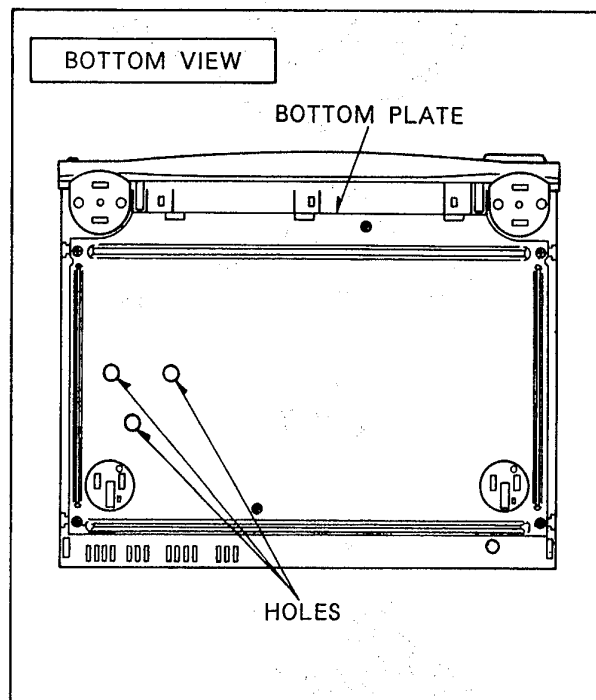


Fig. S4

<D> CAPSTAN STATOR UNIT ASSEMBLY

When replacing the Capstan Stator Unit, the CENTRE FIXING TOOL (VFK0851) must be used to fix the centre of Capstan Stator Unit.

Method:

- 1) Place the Capstan Stator Unit into position.
- 2) Loosely tighten the 3 screws.
- 3) Insert the CENTRE FIXING TOOL (VFK0851) as shown in Fig.S5.
- 4) Tighten the 3 screws.
- 5) Remove the CENTRE FIXING TOOL.

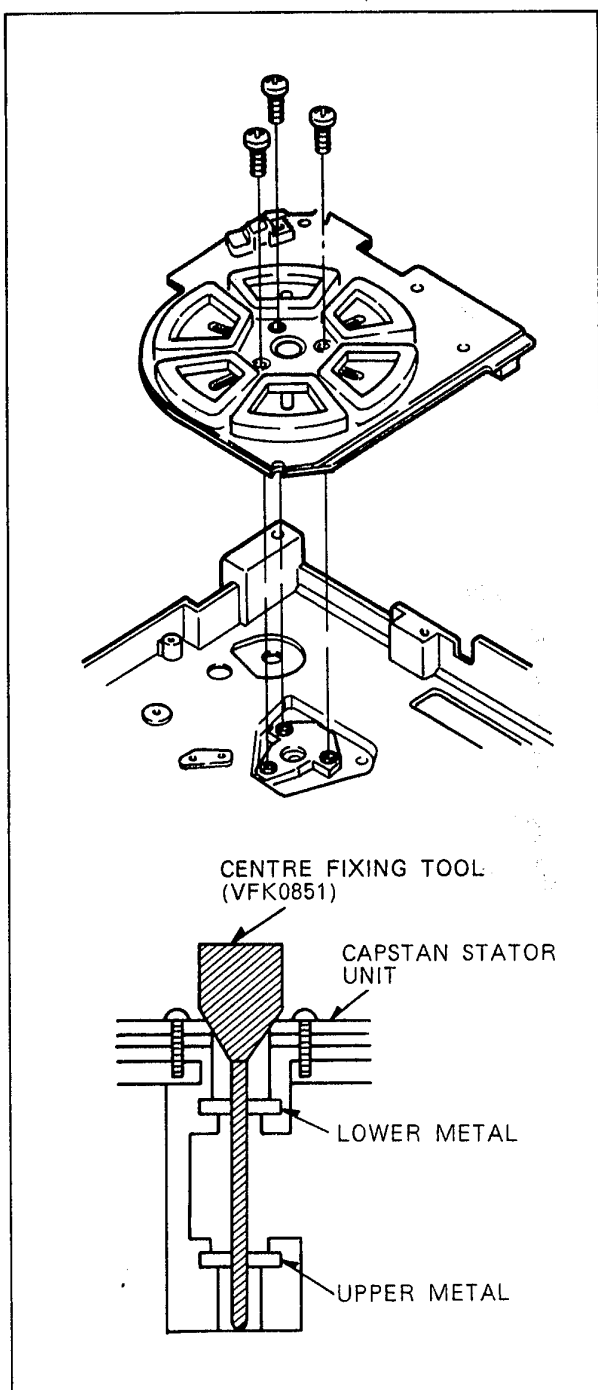


Fig. S5

<E> EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

Note:

If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.

To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

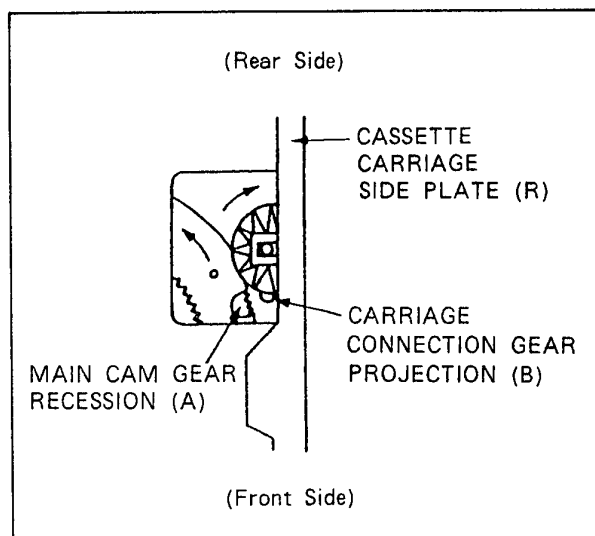


Fig. S6 Top View of Eject Operation

<F> TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

- 1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor.
In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
- 2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit will not operate properly.

<G> POWER TRANSISTOR SERVICING

When removing the connector of the Power Transistor, hold the Power Transistor by hand to prevent damage.

<H> CASSETTE TAPE REMOVAL

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

(1) HAND OPERATION

- 1) Remove the bottom plate.
- 2) Turn the Worm Gear to "A" arrow mark direction manually as shown in Fig.S7, moving the Loading Post to the unloaded position.
- 3) Turn the Capstan clockwise to take up the tape.
- 4) Turn the Worm Gear again to eject the cassette.

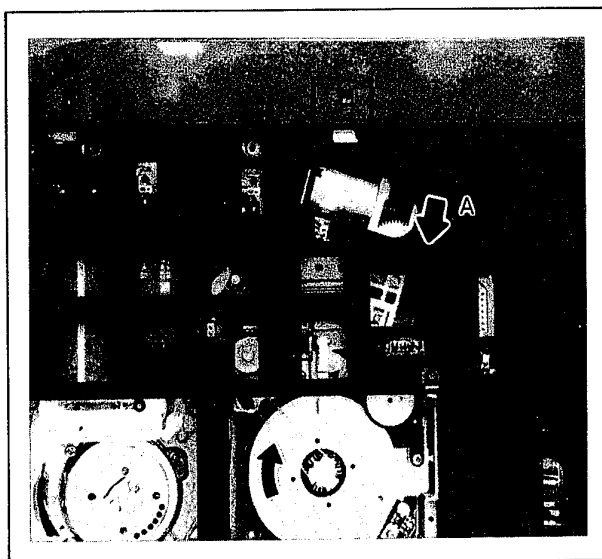


Fig. S7

(2) BATTERY OPERATION

- 1) Connect the battery (Manganese-Type R6 (AA) 3pcs./+4.5V) to P1503 as shown in Fig.S8, S9.
- 2) After moving the Loading Post to the unloaded position, disconnect the battery to stop the motor.
- 3) Turn the Capstan to clockwise to take up the tape.
- 4) Reconnect the battery to eject the cassette.

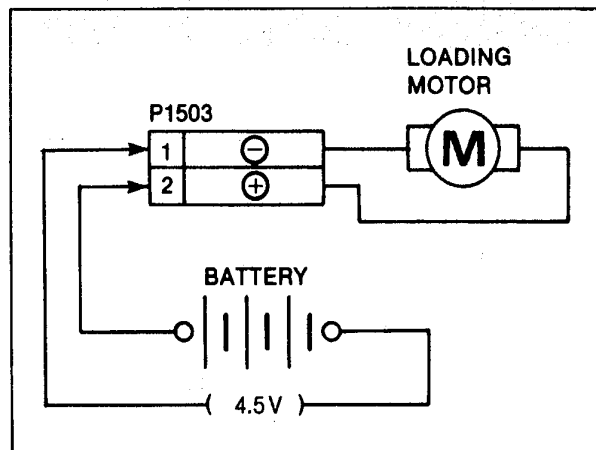


Fig. S8

If the cassette tape can not be removed by the above 2 methods, remove it by the following method

- 1) Remove the Top Panel
- 2) Remove the Front Panel Unit.
- 3) Lift up the Pinch Arm after removing spring.
- 4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
- 5) Turn the Capstan Motor to take up the tape.
- 6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
- 7) Take out the cassette tape from the Cassette Compartment.

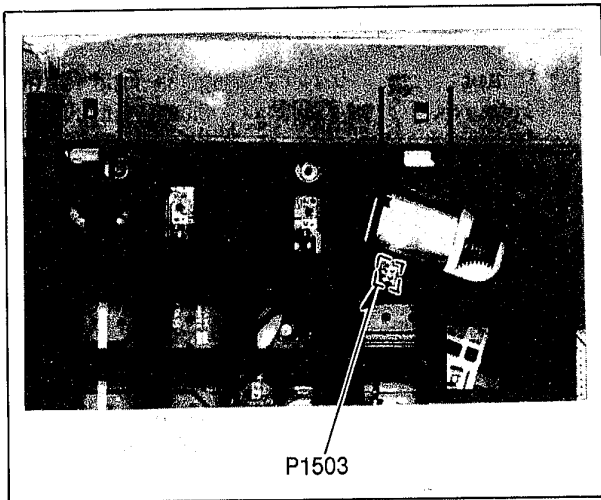


Fig. S9.

<J> CHANNEL MEMORY IC INITIALIZATION

When replacing the channel memory IC7503(Part No.:M6M80011AP) its IC should be initialized.

Method:

- 1) Press the CH UP/DOWN button so that the channel indicator indicates "3"
- 2) Connect a jumper wire twice to Pin 54 and Pin 34 of IC7501.
- 3) Channel indication changes from "3" to "1"

Note:

- 1) It should be performed before tuning.
- 2) Do not turn off the power source during initialization or 1 second after.

<I> FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

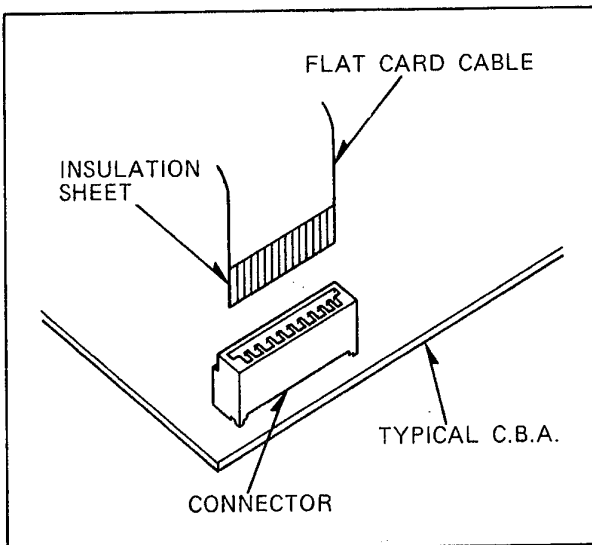


Fig. S10

1-2 SERIAL CLOCK TRANSMISSION ERROR DISPLAY

If the Serial Clock is not transmitted from IC6001 to IC7501, "E9" is displayed as shown in Fig. T1. This indication will be displayed the Operate button is either ON or OFF.

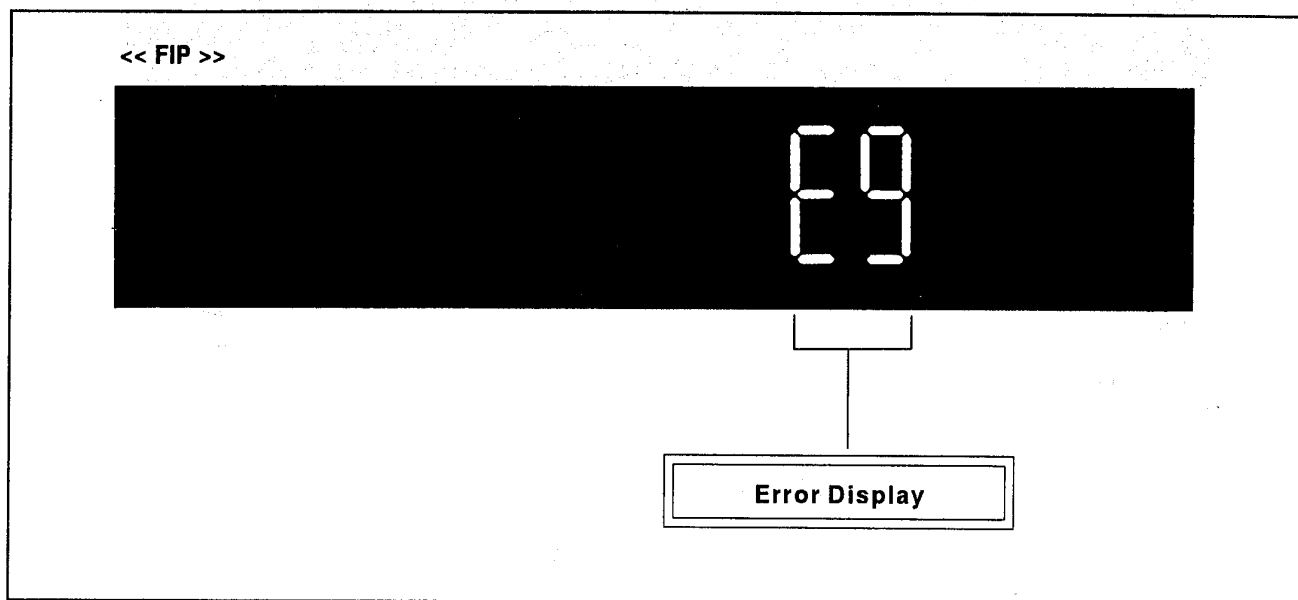


Fig. T1 Serial Clock Transmission Error Display

1-3. SERVICE INFORMATION DISPLAY

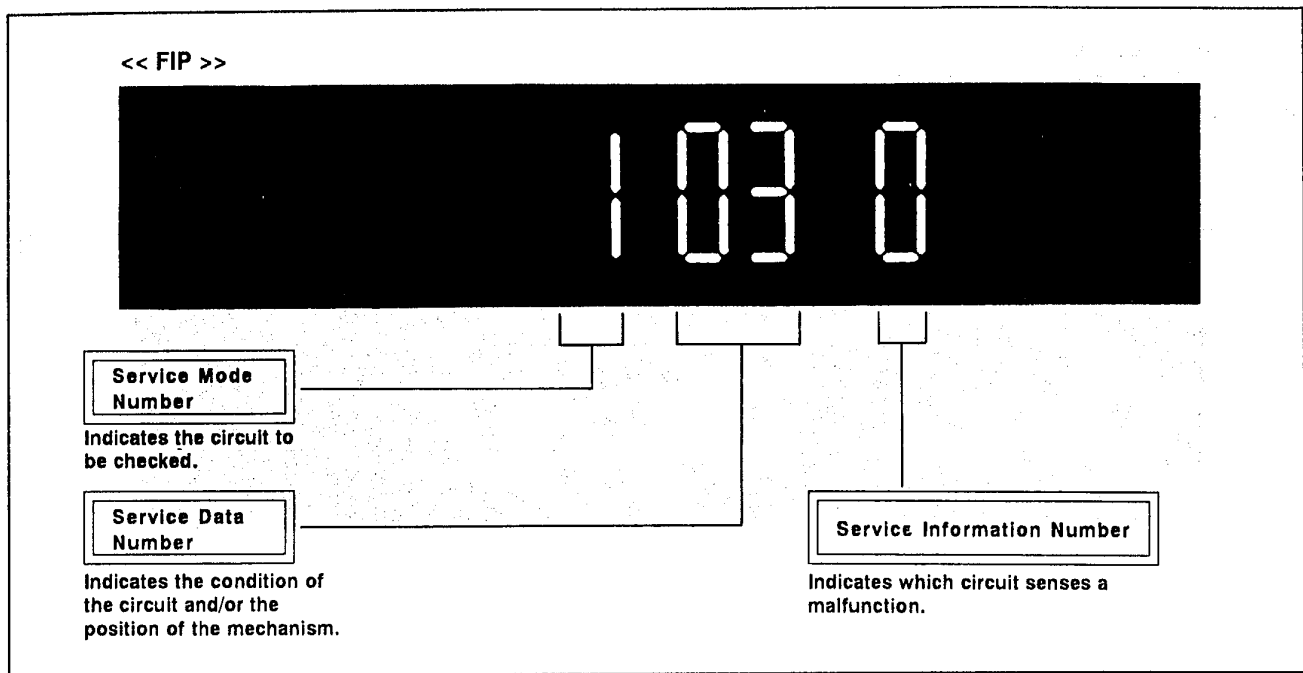


Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

- (1) Press the FF, REW and EJECT buttons simultaneously.
The Service Information will be displayed for 1 minute.
- (2) Connecting a jumper wire between TLSERV and GND will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions. The first digit indicates which of the 7 service modes that the unit is currently in.

- | | |
|--------|-------------------------------------|
| MODE 1 | :Checks tape protection circuit |
| MODE 2 | :Checks tape transport mechanism |
| MODE 3 | :Checks mode switching operation |
| MODE 4 | :Checks control buttons |
| MODE 5 | :Checks capstan motor |
| MODE 6 | :Checks cylinder motor |
| MODE 7 | :Checks loading/unloading operation |

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied

1-3-3. Use of Service Modes

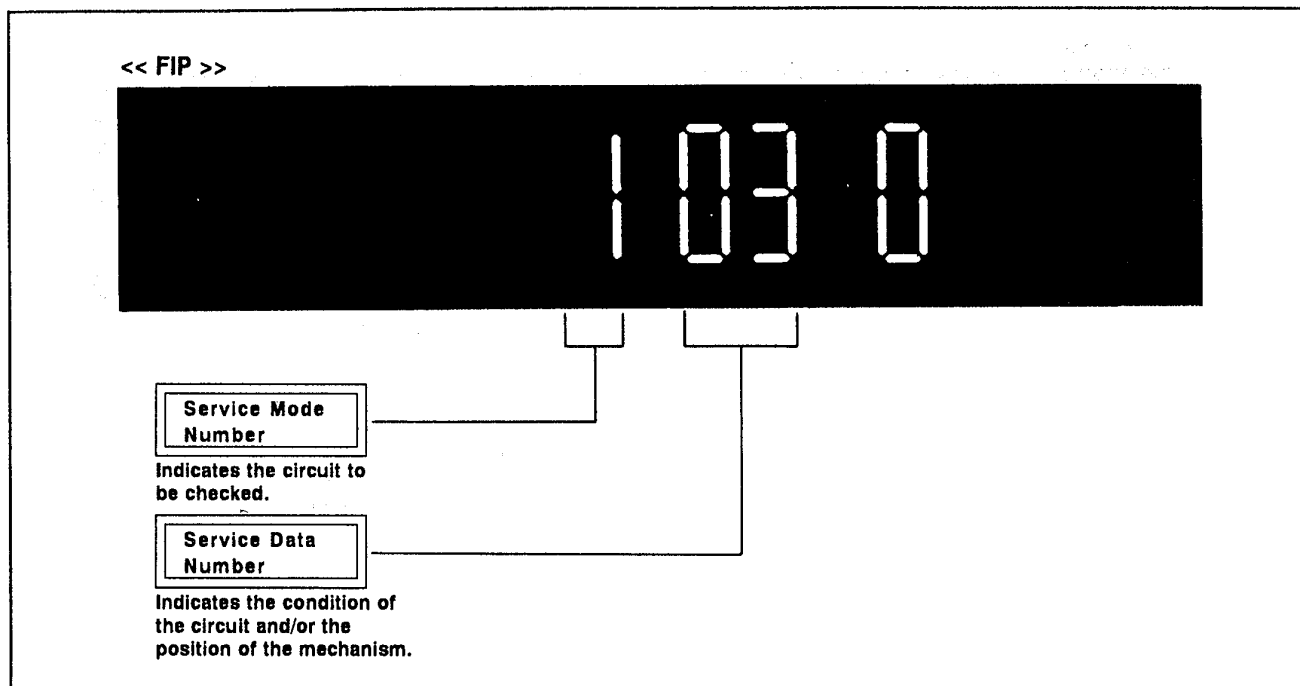


Fig.D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.

(2) To change Service Modes press the FF, REW and EJECT buttons simultaneously.

(3) Mode 1 : Check that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.

1

When the light is blocked to both sensors, " 00 " should be indicated on the service data number. When the light is blocked to the supply sensor, " 01 " should be indicated.

(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position. Service Data Numbers indicate the position of the mode switch and there by the mechanism position.

2

(5) Mode 3 : Checks that mode switch circuit operations have been completed. Service Data Number should indicate " 00 " after each mechanism operation is completed.

3

(6) Mode 4 : Checks the operation circuit. Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.

4

(7) Mode 5 : Checks the capstan motor circuit. Indicates if the IC6001 has received the command to rotate the capstan motor.

5

(8) Mode 6 : Check the cylinder motor circuit. IC6001 has received the command to rotate the cylindermotor.

6

(9) Mode 7 : Checks the Loading/ Unloading Operation. The Loading Motor rotates for loading operation when the " PLAY " button is pressed. The Loading Motor rotates for unloading operation when the " STOP " button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.

7

<NOTE>

Refer to Fig. D5 for details of Service Data Number.

1-3-4. Service Information Number

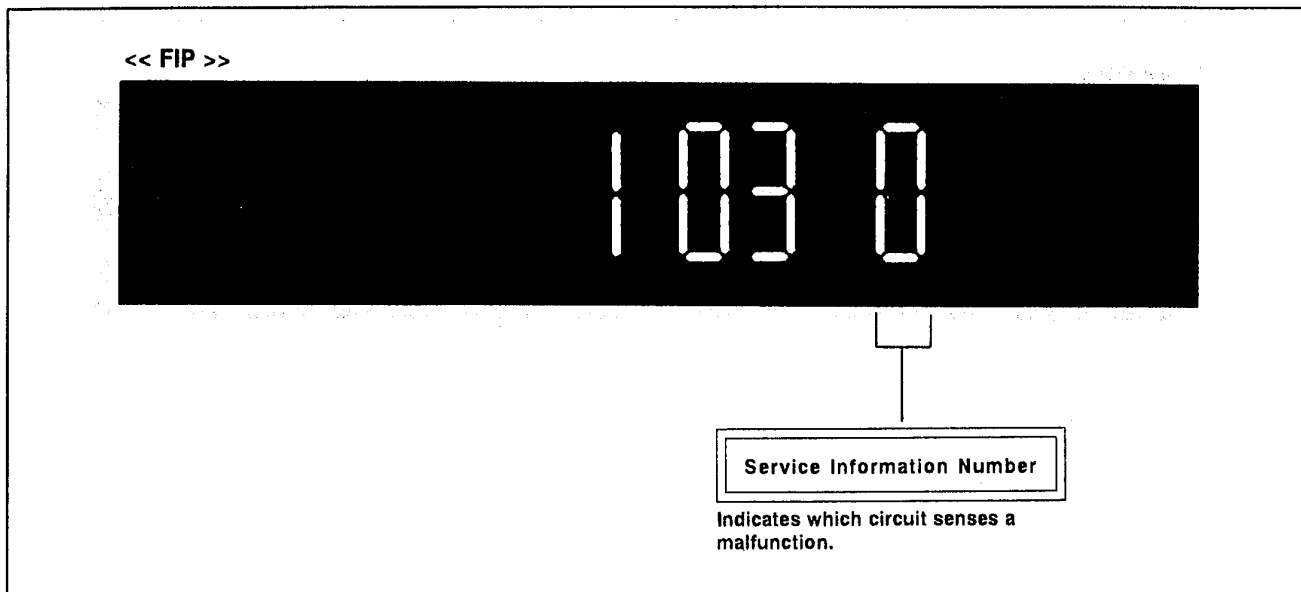


Fig. D3 Service Information Number on S. I. D.

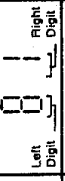
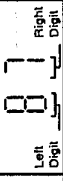
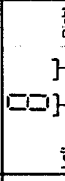
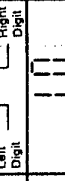
Refer to Fig. D4 for details of Service Information Number.

Note:

The Service Information Number display is independent of the service mode display. The Service Information Number will be stored as long as AC power is supplied. If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-IN/Eject operation
7	D REC 12V error

Fig. D4 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1		00	No light detected at either sensor	Tape not required
		01	Tape Beginning Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2		00	EJECT	Tape Required *1:STOP3; The Pinch Roller is on the capstan motor shaft. *2:STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig.D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP *2	
		06	FF/REW	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	07	Intermediate position	Tape Required.
		00	Any display other than "00" indicates a fault in the mode switch circuit or system.	
4	Display only when the operating button is pressed.	Refer to Fig. D6.		Tape not required
5	Left digit only, disregard Right digit display.		8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.		1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward slow" commands received by IC6001.	
	Right digit only, disregard left digit display.		8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC6001.	
6	Left digit only, disregard Right digit display.		1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	54	RESET
01	EJECT	5	ZERO STOP
-9	PAL/MESECAM	49.40	INDEX
—	CHECK/PROG.	81.82	TRACKING(+,-)/V-LOCK
34 or 35	^ v . + -	—	PROG.
—	NEXT	—	NEXT
—	SLEEP / SHIFT	00	STOP
R4	TIMER REC	03.02	FF, REW
08	REC	—	TV / VTR
—	CLOCK SET	—	DISPLAY
—	TUNER PRESET	00	PLAY
06	PAUSE / STILL		

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position through the Mode SW.

Fig. D7 shows the timing for Service Mode Number 2.

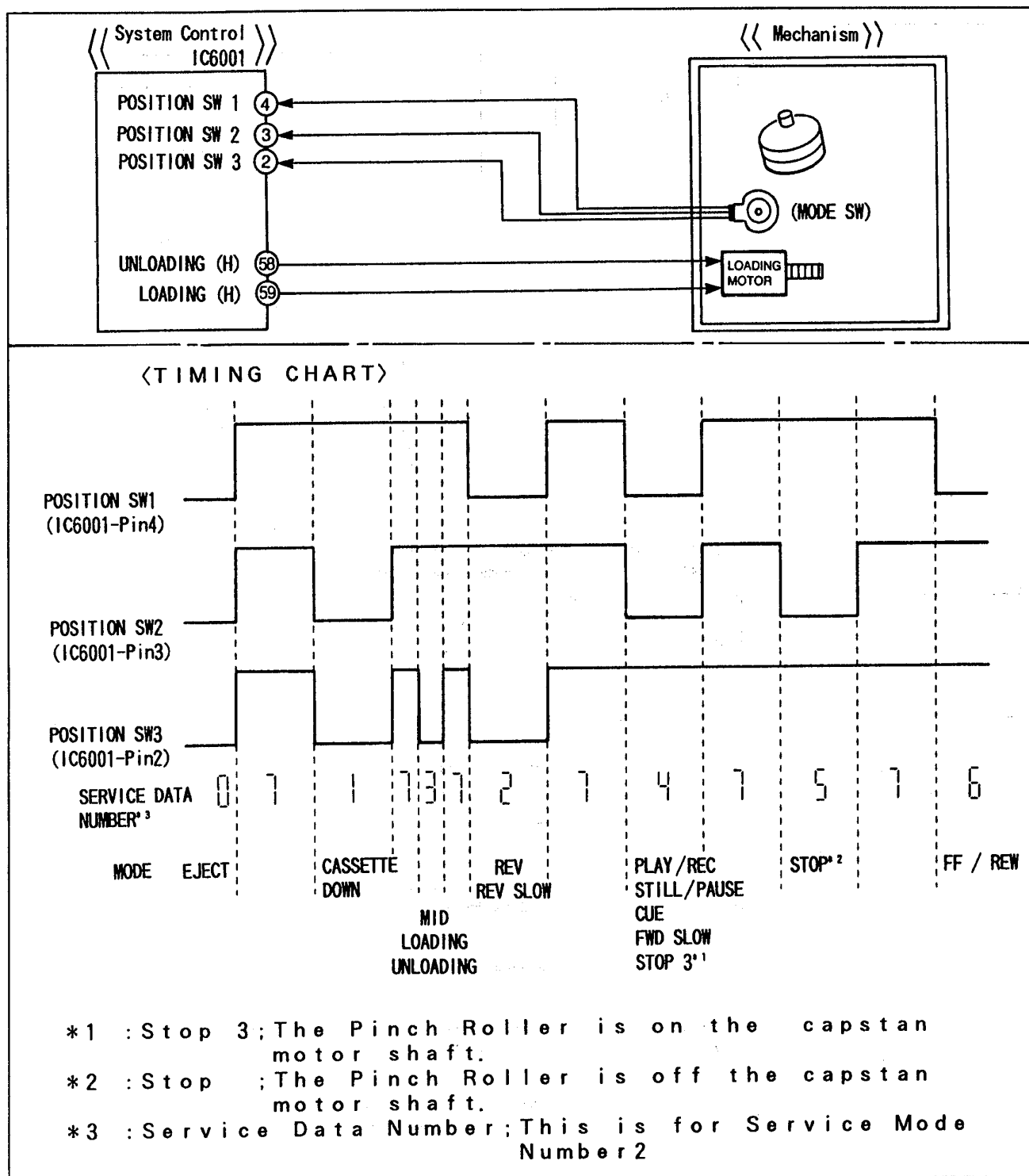


Fig. D7 Timing Chart of Mode SW

1-3-6. Input/Output Chart for IC6001

Pin Number	Input/Output	Port Name	Function																																				
1	I	SAFETY TAB	When inserting the cassette tape with safety tab, this port is low. When there is no safety tab, this port is high to prevent recording.																																				
2	I	POSITION SW 3	<table><tr><th>P.SW 3</th><th>P.SW 2</th><th>P.SW 1</th><th>Position (Mode) Name</th></tr><tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr><tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr><tr><td>O</td><td>I</td><td>O</td><td>REV, REV SLOW</td></tr><tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING / UNLOADING)</td></tr><tr><td>I</td><td>O</td><td>O</td><td>PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1</td></tr><tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr><tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr><tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr></table> (*1) The Pinch Roller is on the capstan motor shaft.	P.SW 3	P.SW 2	P.SW 1	Position (Mode) Name	O	O	O	EJECT	O	O	I	CASSETTE DOWN	O	I	O	REV, REV SLOW	O	I	I	MID (LOADING / UNLOADING)	I	O	O	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1	I	O	I	STOP	I	I	O	FF/REW	I	I	I	INTERMEDIATE
P.SW 3	P.SW 2	P.SW 1		Position (Mode) Name																																			
O	O	O		EJECT																																			
O	O	I		CASSETTE DOWN																																			
O	I	O		REV, REV SLOW																																			
O	I	I		MID (LOADING / UNLOADING)																																			
I	O	O		PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1																																			
I	O	I		STOP																																			
I	I	O	FF/REW																																				
I	I	I	INTERMEDIATE																																				
3	I	POSITION SW 2																																					
4	I	POSITION SW 1																																					
5	I	SUPPLY REEL PULSE	Supply Reel Pulse Input (For detecting tape remaining)																																				
6	I	NORMAL/SERVICE/TEST	Service Mode Setting Normal Mode: High Service Mode: Middle Test Mode: Low																																				
7	I	DEW	When Dew is detected, this port is middle. Normally, this port is low.																																				
8	I	TEST	Not used (Low setting)																																				
9	I	ENVELOPE SELECT	The playback envelope video signal level is detected at this input to select the video head in the special playback modes.																																				
10	O	ROTARY SW	This signal is supplied to the chrominance circuit to perform the phase rotation.																																				
12	O	HEAD AMP SWITCH	This signal is supplied to the head amp circuit to switch the video head, SP or LP.																																				
14	O	ARTIFICIAL V /H/N	Artificial Vertical Sync Signal is supplied to video circuit to stabilize the picture in the special playback modes.																																				
17	I	TAKE-UP PHOTO	Take-up Side Photo Sensor Input (For detecting tape beginning)																																				
18	I	SUPPLY PHOTO	Supply Side Photo Sensor Input (For detecting tape end.)																																				

Pin Number	Input/Output	Port Name	Function
19	I	TAKE-UP REEL	Take-up Reel Pulse Input (For detecting tape remaining and reel (Cap.) lock.
20	O	SP/LP	Tape Speed Output SP: Low LP: High
47	O	VTR (H)	VTR / TV Switch Output VTR: High TV: Low
48	O	SP (H)	Tape Mode Output SP: High LP: Low
54	O	SENSOR LED ON (L)	When turning on the Sensor LED, this port is low. 1) STOP Mode: No lit. 2) FF, REW, CUE, REV Modes: DC is lit. 3) EJECT Mode: Pulse blinking. (Cycle: 320[msec])
55	O	VOLTAGE CHANGE (H)	When increasing the drive torque of loading motor to perform the FF/ REW mode, this port is low.
58	O	UNLOADING (H)	When unloading, this port is high.
59	O	LOADING (H)	When loading, this port is high.
63	O	SERIAL CLOCK	Serial Clock Output
64	I/O	SERIAL DATA	Serial Data In/Out
66	O	DELAYED REC (H)	When the video goes to the recording mode after a delay from the video recording command, this port is high.
67	O	DELAYED AUDIO REC (H)	When the audio goes to the recording mode after a delay from the audio recording command, this port is high.
68	O	FULL ERASE (H)	When the video goes to the recording mode, this port is high.
69	O	REC (H)	When the video goes to the recording mode, this port is high.
70	O	NTSC (L)	System Output NTSC: Low PAL: High
71	O	AUDIO MUTE (H)	When the audio goes to the mute mode, this is high.
72	O	CAPSTAN REVERSE (H)	When the capstan motor rotates in reverse, this is high.
73	O	AUDIO EE (H)	When the audio goes to the EE mode, this is high.

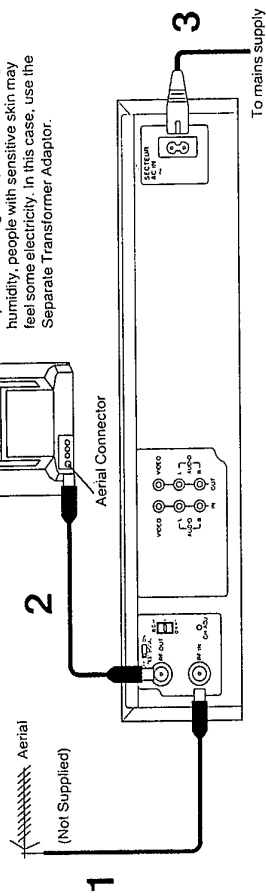
Pin Number	Input/Output	Port Name	Function
75	O	CURRENT EMPHASIS (H)	When the servo goes to the edit mode, this is high.
76	O	FF/REW (L)	When the servo goes to the FF/REW mode, this is low.
78	O	VIDEO EE (L)	When the video goes to the EE mode, this is low.
79	O	TRICK (L)	When the video goes to the special playback (CUE, REV, SLOW, STILL) mode, this is low.
80	O	POWER OFF (H)	Power ON/OFF Control is low when the power switch is turned on.
84	I	RESET (L)	When resetting the IC6001, this port is low.

Connections

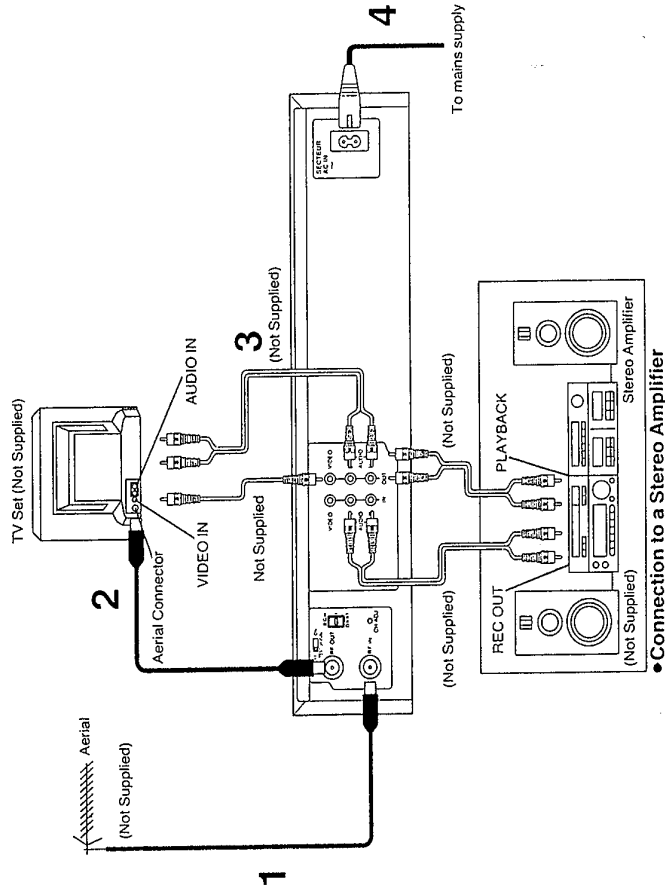
This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VTR through TV set:



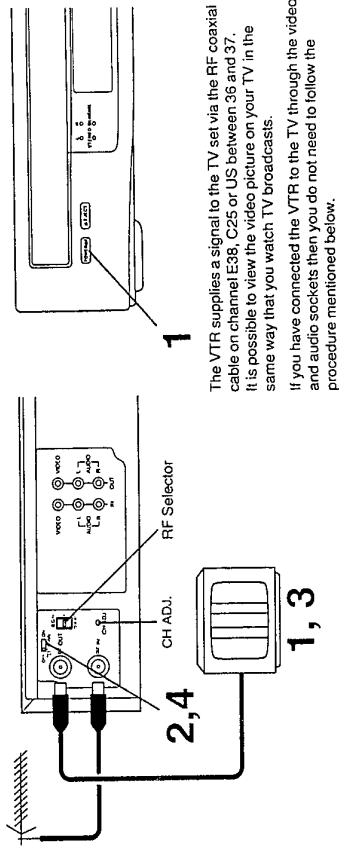
Connection to a TV Set with the Audio/Video Input Sockets



1-4 OPERATING INSTRUCTIONS

Connections Tuning the TV to your VTR

Tuning the TV to your VTR



Operations

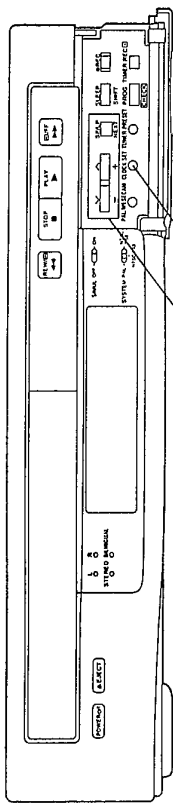
- 1 Turn on the TV and VTR.
- 2 To generate a test pattern, set **TEST SIGNAL** to ON.
- 3 Set the TV to an unused position which you wish to use for your video playback.
- 4 Set **TEST SIGNAL** to OFF.

Note:
The test signal is transmitted on video channel C25 (CHINA), E38 (CCIR) or US between 36 and 37 (NTSC). If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (C24-27, E32-40, US29-39) by using the CH ADJ. screw which is located on the rear of the VTR. Please note that if the CH ADJ. screw is used then you will have to return your TV to the test signal as in items 2 to 4 above.

RF Selector

Use the RF Selector to select the colour TV system used by the TV set to be connected.
B.G.H: PAL B.G.H/SECAM B.G.
I: PAL I
D.K.K1: PAL D/SECAM D.K.K1
• When **SYSTEM** on the front panel is at the NTSC 3.58 position, the NTSC 3.58 system will be selected regardless of the position of the RF selector.

Setting the Clock of the VTR



2 1,3

The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

Preparation
Turn on the VTR.

For Example:
Date, 18th, October, 1999
Time, 20:15

Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:

Resetting the clock to 12:00.00

- 1 Keep **CLOCK SET** pressed at any time between 11:58.00 and 12:01.59 for more than 2 seconds.
- 2 Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Operations

- 1 **CLOCK SET** Keep **CLOCK SET** pressed for more than 2 seconds.

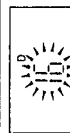
- 2 Set each item by pressing + or -- and **NEXT**.



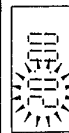
Set Year "99".



Set Month "10".



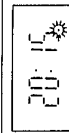
Set Date "16".



Set Hour "20".



Set Minute "15".
• There is no need to press **NEXT**.



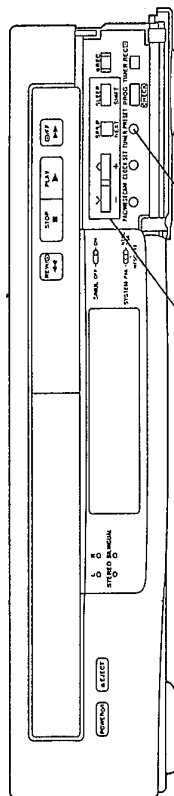
Press **CLOCK SET**.
• The clock will start.

- 3 **CLOCK SET**

Note:

The clock operates for at least 60 minutes by its backup system in the event of power failure.

Storing TV Broadcasts into your VTR



2~5 1,6

Introduction

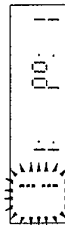
The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 42 TV broadcast stations.

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and Select the programme position except A1.

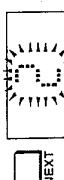
Display Symbols

1 TUNER PRESET



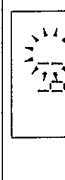
Keep TUNER PRESET pressed for more than 2 seconds.

2



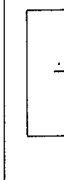
Select the programme position, then press NEXT.

3



Select TV band "I", "III" or "U".

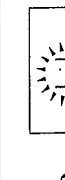
4



Press SHIFT to select the broadcasting system.

- 1 (PAL B.G.H./SECAM B.G.D.K.K1): For receiving PAL B.G.H.D or SECAM B.G.D.K.K1 system broadcasts. Press PAL/MESECAM to select the broadcasting system for the TV station to be tuned. PAL: MESECAM indicator should not be lit. SECAM: MESECAM indicator should be lit.
- 2 (PAL I): For receiving PAL I system broadcasts.
- 3 (NTSC): For receiving NTSC system broadcasts. Then press NEXT.

5



Search for the required TV station by pressing and holding + or -. Release once the station has been found. • Search speed changes quickly by pressing SHIFT simultaneously with + or -. • Press NEXT and repeat steps 2-5 for each programme position you want to tune to a station.

6 TUNER PRESET



Press TUNER PRESET twice.

Fine Tuning Procedure

- 1 Keep TUNER PRESET pressed for more than 2 seconds, and then press again.
- 2 Press NEXT.
- 3 Press + or - to obtain the best tuning condition. • "A" indicator disappears. • To return the tuning to its former state, press SHIFT.
- 4 Press TUNER PRESET.

Blanking of Unoccupied Programme Positions

- 1 Keep TUNER PRESET pressed for more than 2 seconds.
- 2 Select a programme position which you do not want to tune to a TV station, by using + or -.
- 3 Press SHIFT. ("—" is displayed) • Repeat steps 2 and 3 for another unoccupied programme positions. • To cancel the blanking of a programme position, select that programme position on the VTR and then press SHIFT.
- 4 Press TUNER PRESET twice.

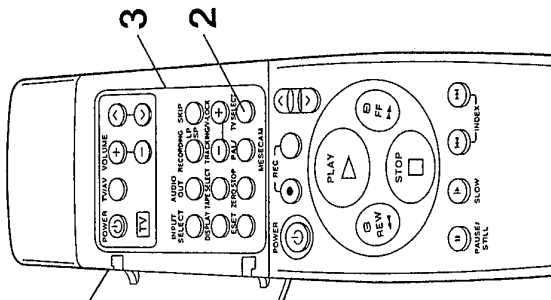
Channel Plan

SYSTEM	VHF		UHF
	I	III	U
CCIR STD (B.G.H)	2-4 S1-S3	5-12 M1-U10	21-69
CHINA (D)	1-5	6-12	13-57
EAST EU (D.K.K1)	1-5	6-12	21-69
HONG KONG, UK (I)	—		21-69
USA (NTSC)	2-6 A-5-A-3	7-13 A-2-W	14-79
JAPAN (NTSC)	1-3	4-12	13-62

*CATV: VHF 44-300 MHz

Setting the Remote Controller for Operation of your TV

You can operate some manufacturer of TVs (See Table below) using the supplied Remote Controller after this setting up.



Preparation

- Turn on the TV.
- Install the batteries in the remote controller. See page 11.

Operations

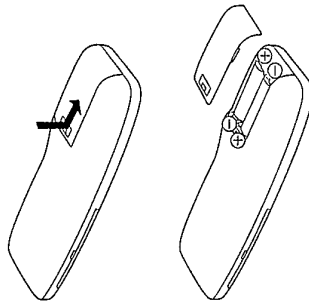
- 1 Open the door of the remote controller.
 - 2 Keep TV SELECT pressed.
 - 3 Press corresponding operation button to your TV manufacturer while keeping TV SELECT pressed.
- If setting is correct, TV will be turned off automatically.
- 4 Close the door of the remote controller.

Power Source for the Remote Controller
The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

- Load the new batteries with their polarity (+) and (-) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries



TV Manufacturer	Operation Button
Panasonic/National	TV SELECT + POWER
	TV SELECT + TV/AV
	TV SELECT + VOLUME
	TV SELECT +
SONY	TV SELECT +
	TV SELECT +
TOSHIBA	TV SELECT +
JVC	TV SELECT + INPUT SELECT
HITACHI	TV SELECT + RECORDING LP SP
MITSUBISHI	TV SELECT + SKIP
	TV SELECT + DISPLAY
SHARP	TV SELECT + RESET
PHILIPS	TV SELECT + ZERO STOP

When the TV manufacturer is Panasonic/National or MITSUBISHI:

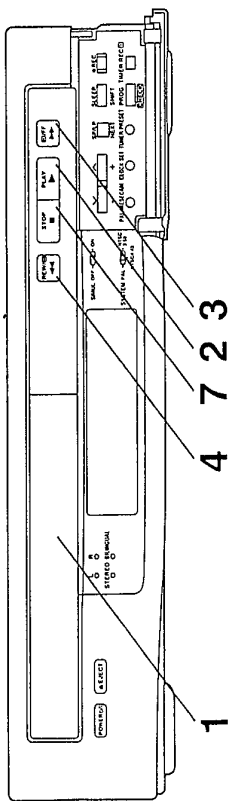
When the TV's power is turned off in step 3 above, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the operation button matches the manufacturer of TV.
If it is not possible to adjust the TV's volume, try pressing the other operation button to match the manufacturer of TV again until the volume can be adjusted.

Note:

Some TV models cannot be operated using this remote controller.

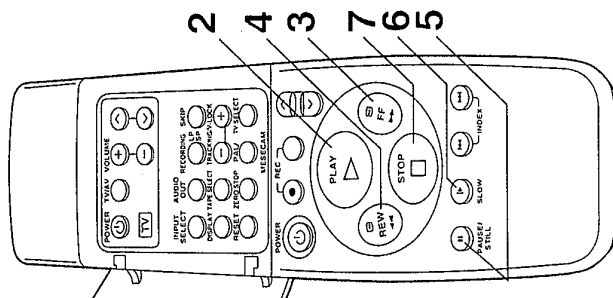
Playback

Playback



Operations Display Symbols

Operations	Display Symbols
1 Insert a recorded cassette tape.	
2 Start viewing the picture.	
3 Search forward by tapping FF.	
4 Search backward by tapping REW.	
5 View a still picture.	
6 View the slow motion picture.	
7 Stop viewing the picture.	

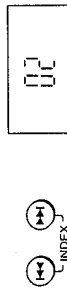


1-20

To find the Beginning of Each Recording

For example:
Searching for the 2nd recorded segment in the forward direction.

Press INDEX ►►H twice.



- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press INDEX ◀◀.
- Up to 20 index signals can be searched for in both directions.
- The figure on the display is decremented by 1 each time an index signal is located.

Recording Index Signals

- Index signals are recorded in following cases.
- When a recording is started by pressing REC
- When REC is pressed during recording
- When timer recording is activated

Note:

- During Playback, set PAL/MESECAM.
- PAL: When playing back a tape recorded in the PAL system
- MESECAM: When playing back a tape recorded in the MESECAM system

- MESECAM Indicator lights up.
- Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.
- Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.
- The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.

Other Playback Functions

To obtain High Speed Picture During Fast Forward or Rewind

Keep FF pressed during fast forward.
Keep REW pressed during rewind.



To skip Scene

Press SKIP during playback.



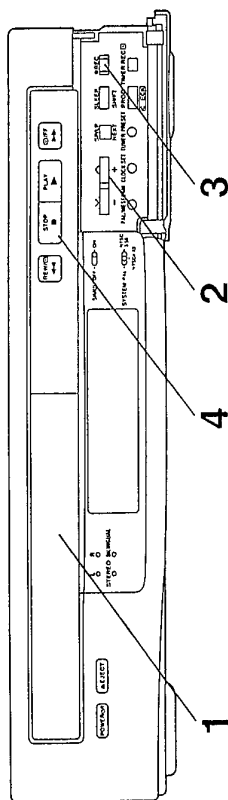
- The following 30 seconds will be skipped.
- Each press gives a 30 seconds time span up to 4 minutes.

To return to a Specified Scene

- 1 Press RESET to set the counter to 0:00.00.
- 2 After playback, press ZERO STOP in the stop mode.



- The tape will be rewound or fast forwarded to 0:00.00.



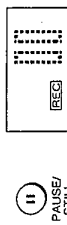
Operations Display Symbols

- 1 Insert a cassette tape.
• If it has already been inserted, press POWER to turn the VTR on.
- 2 Select TV station.
- 3 Start recording.
- 4 Stop recording.

- ### To select the Desired Tape Speed
- 1 Press RECORDING SP/LP to display the tape speed indicator.
 - 2 Keep RECORDING SP/LP pressed for more than 2 seconds while the tape speed indicator is displayed, to change the tape speed.



To Interrupt Recording
Press PAUSE/STILL during recording.
Press again to continue recording.



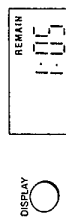
- ### To record One TV Programme while Viewing Another Programme
- 1 Refer to the manual recording operations steps 1 to 3.
 - 2 Select the TV programme on your TV set you wish to view at the present time.

- ### To display the Approximate Remaining Tape Time
- 1 Press TAPE SELECT to select the corresponding cassette tape length.



E195: For E30, -60, -80, -120, -180 and -195 tapes
E240: For E240 tape
E260: For E260 tape

- 2 Press DISPLAY.



→ Clock → Counter → Remaining Tape Time →

Recording of Stereo and Bilingual Programmes

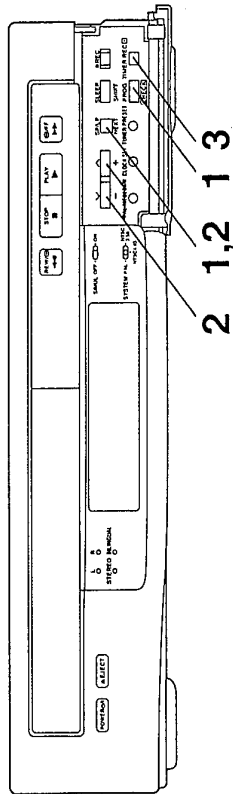
- 1 Recordings are automatically made in the stereo or bilingual mode. This prevents errors in the selection of the dubbed or the original language.
- 2 During playback press AUDIO OUT to select the desired language. See page 22.



Notes:

- Set SYSTEM according to the colour TV system.
- NTSC 3.58: When receiving NTSC 3.58 signals.
- NTSC 4.43: When receiving NTSC 4.43 signals.
- PAL: When receiving PAL or SECAM signals.
- When a video cassette with a broken off tab is inserted, the 'LOCK' indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

Timer Recording



Up to 8 timer programmes can be recorded up to one month in advance by setting the timer.

Preparation

Insert a cassette tape with an intact erasure prevention tab.

For Example:

Timer Programme number; 1
Programme position (channel); 2
Date; 27th, October
Starting time; 20:02
Ending time; 21:30
(Present date; 16th October)

Operations

Display Symbols

1 Select Timer Programme number "1", and then press NEXT.

P1 : When nothing is programmed
P1 : When something has already been programmed

2 Set each item by pressing + or - and NEXT.

Set Programme position (channel) "2".

Set Date "27".

Set Starting time (hour) "20".

Set Starting time (minute) "02".

Set Ending time (hour) "21".

Set Ending time (minute) "30".

• There is no need to press NEXT.

3 To activate timer recording, press TIMER REC.

Timer Recording from External Signal

Source

If timer recording is performed by a unit connected to the Audio/Video input sockets, select the A1 indicator for the programme position.

Selecting the Desired Tape Speed

After step 2, press NEXT and select SP or LP by pressing + or -.

Setting other Programmes in Succession

Repeat steps 1 and 2.

Checking a Timer Programme

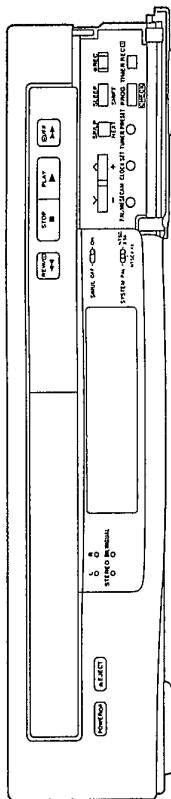
Select the timer programme number to be checked by PROG/CHECK/ while the timer recording function is on.

Cancelling a Timer Programme

- 1 Release from the standby mode by pressing TIMER REC.
- 2 Select the timer programme number to be cancelled by pressing PROG/CHECK.
- 3 Press + and - simultaneously for more than 3 seconds.

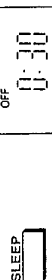
Note:

If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later. However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.



Automatic VTR off time setting

Press SLEEP for the desired time.



- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press SLEEP repeatedly to set 0:00.

NTSC Playback

Tapes recorded in the NTSC system can be played back with this VTR via a PAL system TV set.

- Set SYSTEM according to the colour TV system of the TV set.
- NTSC 3.58: Via a 3.58 system TV set.
- NTSC 4.43: Via a 4.43 system TV set.
- PAL: Via PAL system TV set.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback

When the VTR is off, an inserted cassette can be played back by pressing PLAY.

Automatic Rewinding

When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing EJECT. The VTR will eject the cassette and automatically turn itself off again.

Recording of Simulcast Sound

Set SIMUL to ON.

While this switch is in the "ON" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the Hi-Fi sound tracks.

Assembly Editing

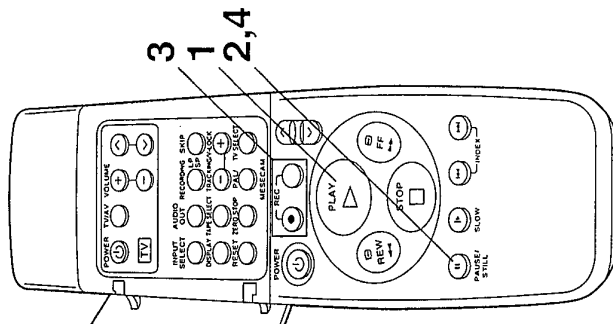
This function can be used to make up an edited tape from other recordings or video sources.

This enables you to record a new segment immediately after a previously recorded segment.

Preparation

- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing INPUT SELECT to set A1.
- Set SYSTEM according to the colour TV system of the video source.
- NTSC 3.58: When receiving NTSC 3.58 signals.
- NTSC 4.43: When receiving NTSC 4.43 signals.
- PAL: When receiving PAL or SECAM signals.
- Set PAL/MESECAM according to the colour TV system of the video source.
- PAL: When receiving PAL signals
- MESECAM: When receiving SECAM/MESECAM signals

The MESECAM indicator lights up.



Operations

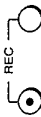
1 Search for the end of the previous recording.



2 Press PAUSE/STILL.



3 Press REC to switch the VTR from the pause mode to the recording standby mode.



4 Start the new recording by pressing PAUSE/STILL again.

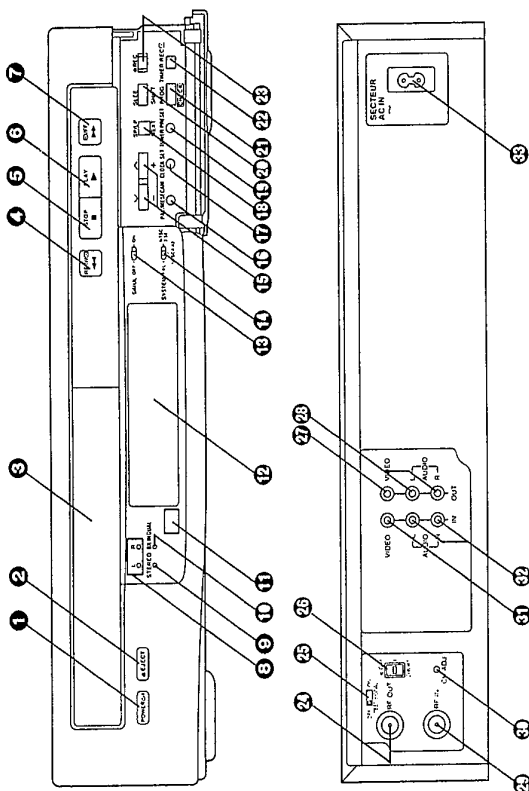


Note:

The new sound will be recorded on both the normal and Hi-Fi sound tracks, only monaural sound recording is possible on the normal sound tracks.

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.



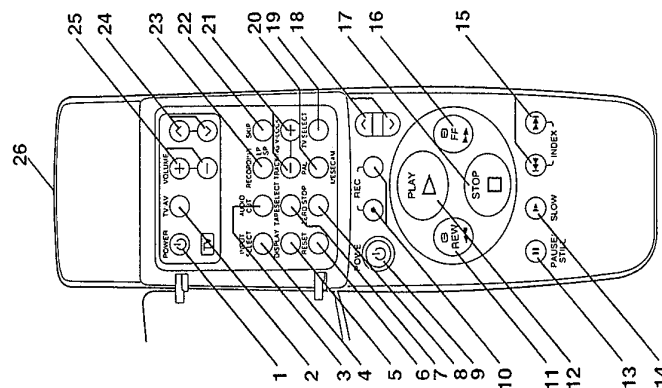
- 1 POWER ON/OFF**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.
- 2 EJECT**
To eject a video cassette.
- 3 Cassette Compartment**
Insert a video cassette here.
- 4 REW (REWIND)**
In the stop mode: To rewind the tape.
In the playback mode: To search backward.
In the rewind mode: To obtain high speed picture. "3<1" is lit.
- 5 STOP**
To stop any playback or recording.
- 6 PLAY**
To start playback. ">" is lit.
- 7 FF (FAST FORWARD)**
To fast forward the tape.
In the stop mode: To search forward.
In the last forward mode: To obtain high speed picture. "D>" is lit.
- 8 Audio Output Mode Indicators**
The Left (L) and Right (R) Indicators show which sound mode is selected in the following way.
Stereos: Both the Left (L) and Right (R) Indicators are lit.
Left: The Left (L) Indicator is lit.
Right: The Right (R) Indicator is lit.
Normal: Both the Left (L) and Right (R) Indicators are not lit.
- 9 STEREO Indicator**
When a stereo programme is received, this indicator lights up.
- 10 BILINGUAL Indicator**
When a bilingual programme is received, this indicator lights up.
- 11 Infra-red Remote Control Receiver Window**
- 12 Display**

Controls and Connection Sockets

- 13 SIMUL**
While this switch is in the "ON" position, the sound portion of the TV broadcast signal will be recorded only on the "normal" sound track. And the stereo sound signal received via the FM tuner will be recorded on the Hi-Fi sound tracks.
- 14 SYSTEM**
Set according to the colour TV system.
NTSC 3.58: When receiving NTSC 3.58 signals.
NTSC 4.43: When receiving NTSC 4.43 signals.
PAL: When receiving a PAL or SECAM signals.
- 15 V ^/- +**
To select the required programme position (TV station).
To set the clock and timer recording.
- 16 PAL/MESECAM**
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.
- 17 CLOCK SET**
To set the time.
- 18 SP/LP/NEXT**
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.
To proceed to the next item during setting procedure.
- 19 TUNER PRESET**
To initiate TV station settings for the tuner.
- 20 SLEEP/SHIFT**
To set the time to turn off the VTR automatically.
To blank unoccupied programme position.
- 21 PROG/CHECK**
To select a timer programme number.
P1, P2, P3... or Pg* is lit.
To display details of preset timer recording while the timer recording function is on.
- 22 TIMER REC**
To turn the timer recording function on and off.
[] is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.
- 23 REC**
To start a recording.
- 24 RF OUT**
To connect to the aerial terminal on a TV set.
- 25 TEST SIGNAL**
The test signal is transmitted on channel E38 (C25, US between 36 and 37, J between 35 and 36).
- 26 RF Selector**
To select the colour TV system used by the TV set to be connected.
B.G.H: PAL B.G.H/SECAM B.G.
I: PAL I
D.K.K1: PAL D/SECAM D.K.K1
• When SYSTEM on the front panel is at the NTSC 3.58 position, the NTSC 3.58 system will be selected regardless of the position of the RF selector.
- 27 VIDEO OUT**
To connect the video cable to a TV or another video recorder.
- 28 AUDIO OUT**
To connect the audio cable to a TV or another video recorder.
- 29 RF IN**
To connect to the external aerial.
- 30 CH ADJ.**
To adjust the RF transmitting channel E32-40 (C24-27, US29-39, J28-38).
- 31 VIDEO IN**
To connect the video cable to a Movie Camera or another video recorder.
- 32 AUDIO IN**
To connect the audio cable to a Movie Camera or another video recorder.
- 33 AC IN-**
To connect to the main power supply.

Infra-red Remote Controller

Infra-red Remote Controller



- 1 POWER (TV)**
To switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
• With some TV models, it may only be possible to switch the TV to standby mode using this button.
- 2 TV/AV**
To select the TV input.
- 3 AUDIO OUT**
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.
Stereo → Left → Right → Normal audio track
The left (L) and Right (R) indicators show which sound mode is selected in the following way.
Stereo: Both the Left (L) and Right (R) indicators are lit.
Left: The Left (L) indicator is lit.
Right: The Right (R) indicator is lit.
Normal: Both the Left (L) and Right (R) indicators are not lit.
- 4 INPUT SELECT**
To select the "A1" external recording source.
- 5 DISPLAY**
To change the indication on the VTR Display.
Clock → Counter → Remaining Tape Time
- 6 RESET**
To reset the tape counter (elapsed time) to "0:00.00".
• The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.
- 7 TAPE SELECT**
To set the cassette tape length in order to obtain correct indication of the remaining tape time.
E195: For E30, -80, -120, -180 and -195 tape
E240: For E240 tape
E260: For E260 tape
- 8 ZERO STOP**
For the zero stop function.
- 9 POWER (VTR)**
To switch the VTR from on to standby mode or vice versa. In standby mode, the VTR is still connected to the mains.
- 10 REC**
To start a recording.
• Press both buttons simultaneously.
- 11 REW (REWIND)**
To rewind the tape
In the stop mode: To search backward
In the playback mode: To obtain high speed picture
"◀" is lit.
- 12 PLAY**
To start playback "▷" is lit.
- 13 PAUSE/STILL**
During playback: Still picture.
During recording: To interrupt recording.
- 14 SLOW**
For the slow motion playback function.
- 15 INDEX**
For the index search function.
- 16 FF (FAST FORWARD)**
In the stop mode: To fast forward the tape
In the playback mode: To search forward
In the fast forward mode: To obtain high speed picture
"▷▷" is lit.
- 17 STOP**
To stop any playback or recording.
- 18 √ ∨ (VTR)**
To select the required programme position (TV station) of the VTR.
- 19 TV SELECT**
To set the remote controller for operation of the TV.
- 20 PAL/MESECAM**
Set according to the colour TV system used during recording and playback.
When the MESECAM indicator is lit, the MESECAM system is selected.
- 21 TRACKING/LOCK**
For manual tracking adjustment
The + and - buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.
For slow tracking adjustment
When noise bars appear during Still or Slow playback, switch over to slow playback and adjust with the + or - Button to reduce the noise bars.
For vertical locking adjustment
Use the + and - buttons to minimize any vertical jitter during still-picture playback.
- 22 SKIP**
To start cue playback in 30 seconds interval during playback.
• Each press gives a 30 seconds time span up to 4 minutes.
- 23 RECORDING SP/LP**
To select the tape speed desired for recording.
SP gives the best picture quality.
LP gives the longest recording time.
- 24 √ ∨ (TV)**
To select the required programme position (TV station) of the TV.
- 25 VOLUME**
To adjust the volume of the TV.
- 26 Infra-red Transmitter**
The programming data are transmitted from here to the VTR.

SECTION 2 ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing. When reassembling, perform the steps in the reverse order.

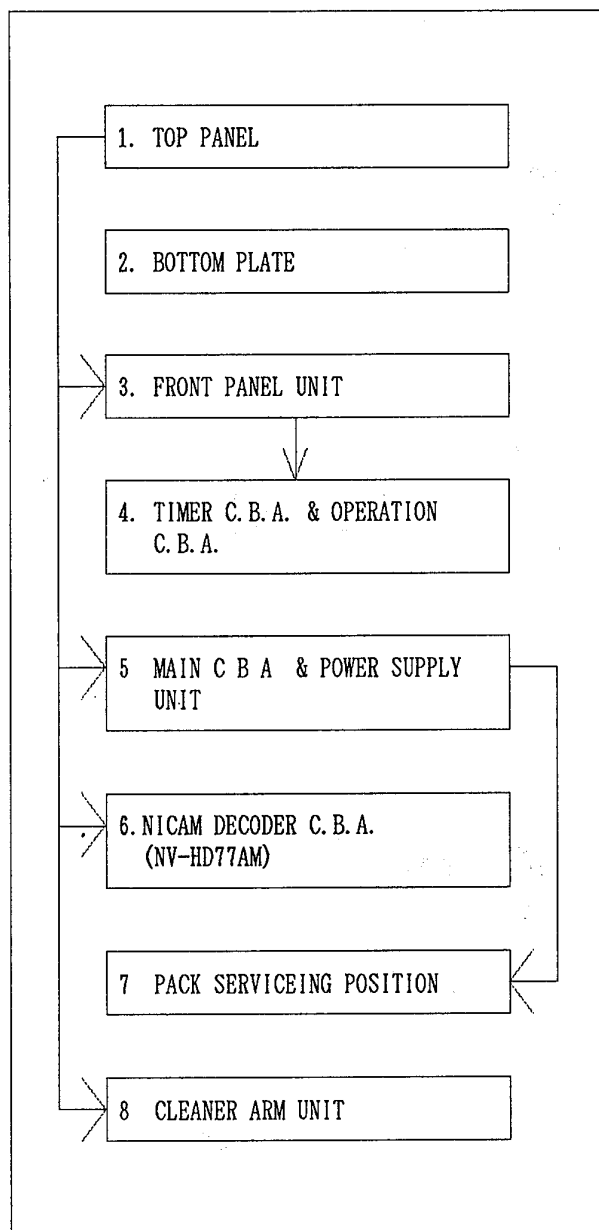


Fig. D1

1. REMOVAL OF THE TOP PANEL

Remove.....4 Screws(A)

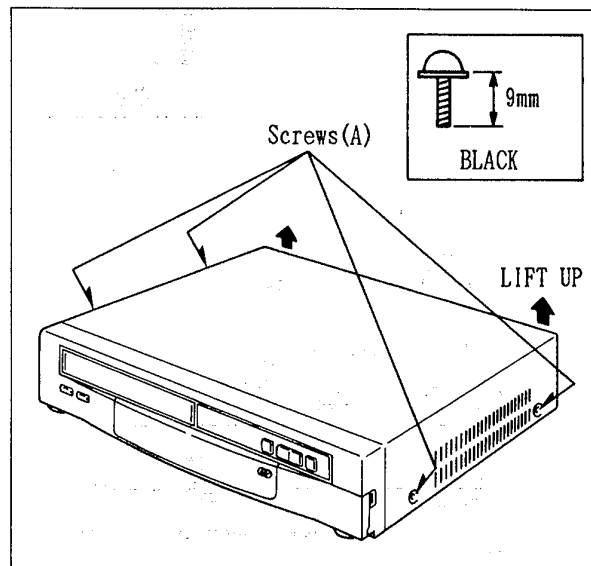


Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove.....6 Screws(B)

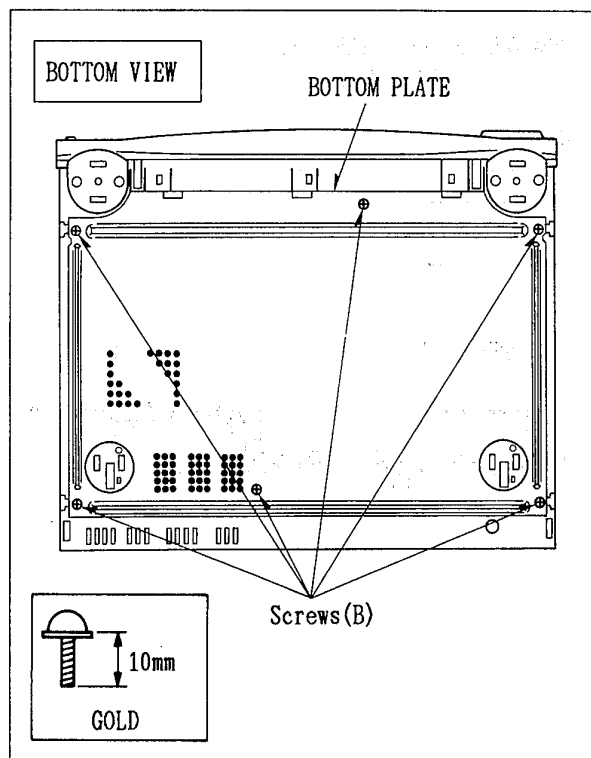


Fig. D3

SECTION 2

3. REMOVAL OF THE FRONT PANEL UNIT

Remove.....Screw(C)
Unlock.....8 Tabs(D)

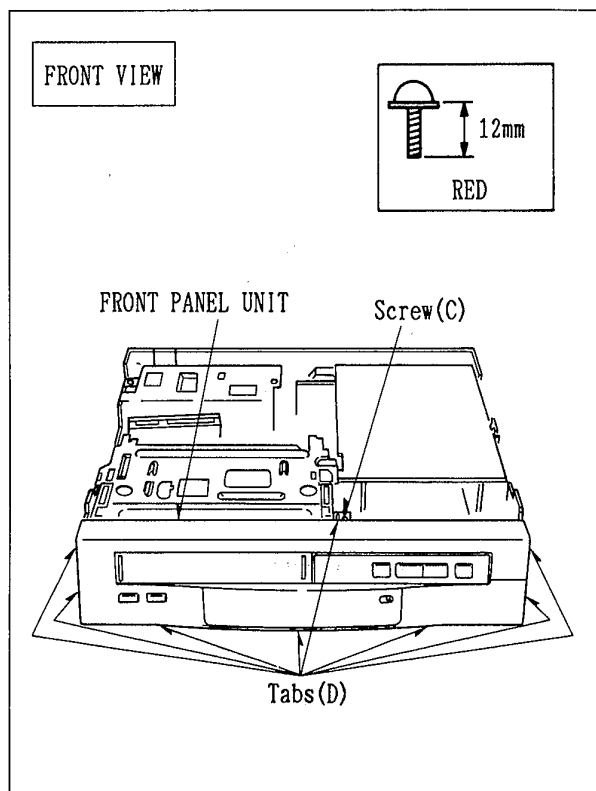


Fig. D4

4. REMOVAL OF THE TIMER C. B. A. & THE OPERATION C. B. A.

Unlock.....8 Tabs(E)

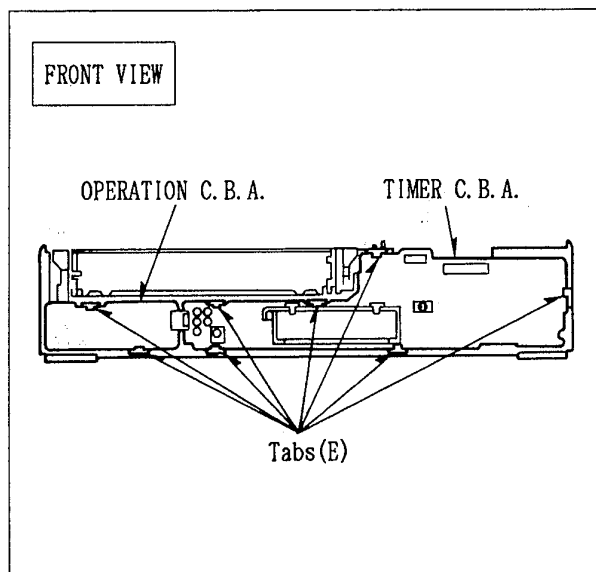


Fig. D5

5. REMOVAL OF THE MAIN C. B. A. & THE POWER SUPPLY UNIT

REMOVAL OF THE MAIN C. B. A.

Remove.....2 Screws(F)
Remove.....3 Screws(G)
Unlock.....Tab(H)

REMOVAL OF THE POWER SUPPLY UNIT

Remove.....2 Screws(I)
Remove.....Screw(J)

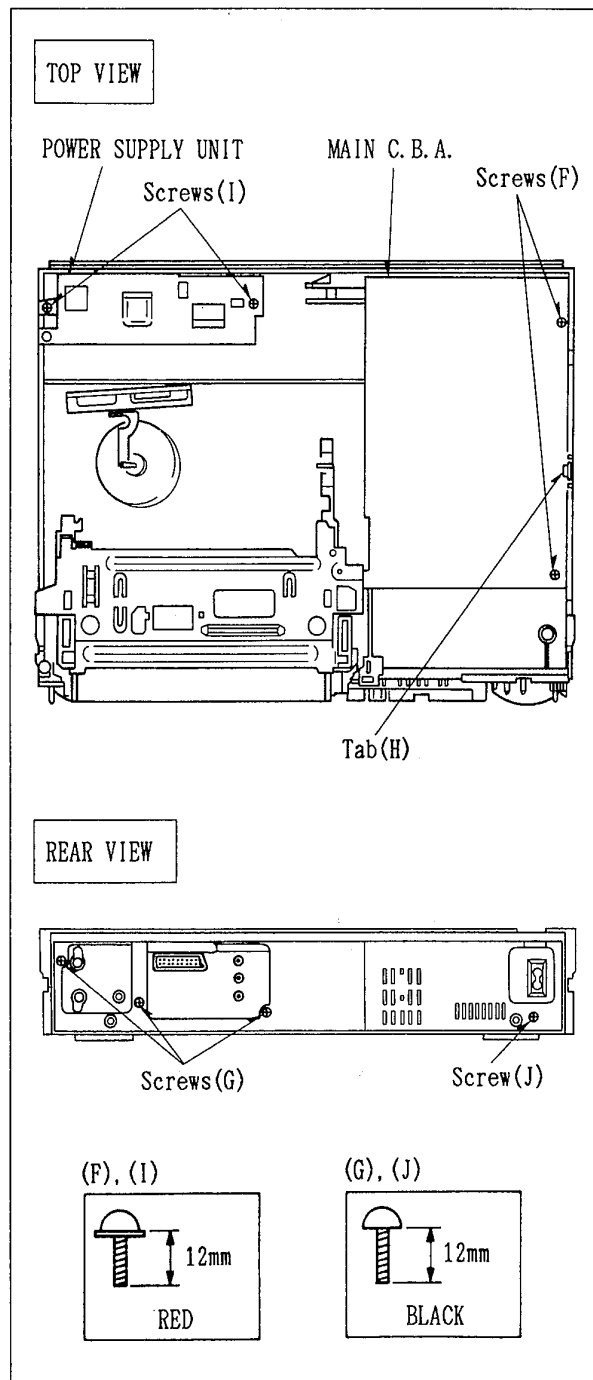


Fig. D6

6 REMOVAL OF THE NICAM DECODER C B A (NV-4D77AM)

Unlock...NICAM HOLDER(K)

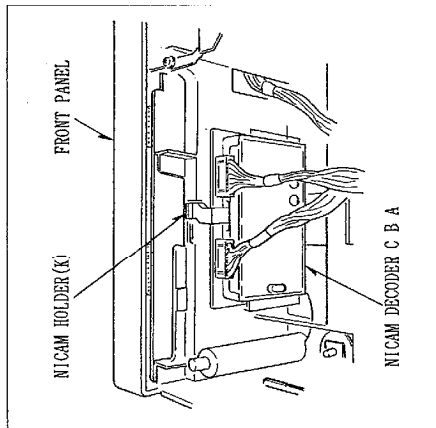


Fig. D7

7. PACK SERVICING POSITION

CAUTION:
Confirm the isolation between Mechanical Chassis and Main C B A before connecting Main AC.

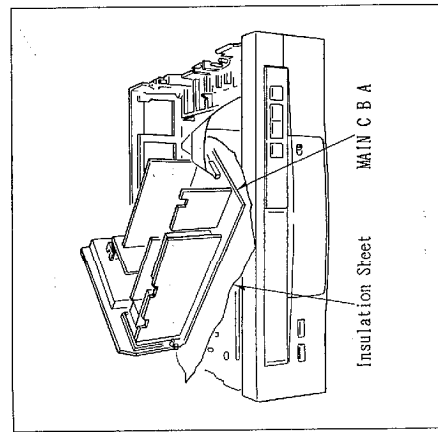


Fig. D8

8 REMOVAL OF THE CLEANER ARM UNIT (NV-4D77AM)

Unlock.....Tab(L)

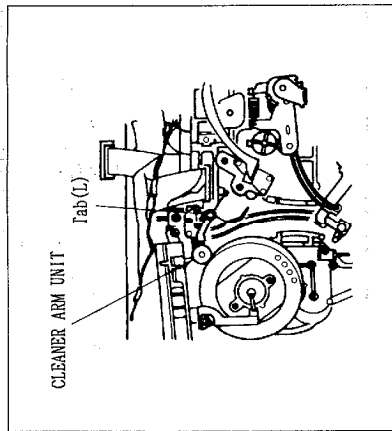


Fig. D9

2-2 MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K-Mechanical Chassis. Therefore refer to the Service Manual for K-Mechanical Chassis. (Order No. VRD9307M131)

CAUTION:

To make a adjustment mode for Tape Interchangeability, connect a jumper wire which has been cut as shown in Fig.M1.

(Auto Tracking is turned off)
After finishing the adjustment, disconnect the jumper wire.

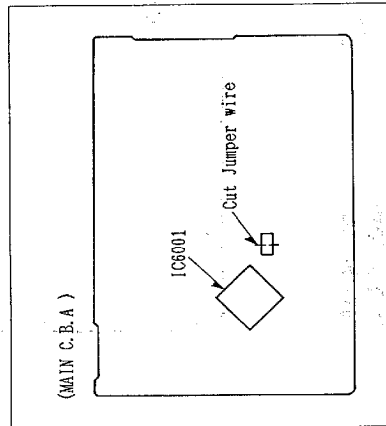


Fig. M1

2-3. DISASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K-Mechanical Chassis. Therefore refer to the Service Manual for K-Mechanical Chassis. (Order No. VRD9307M131)

2-4 ASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K-Mechanical Chassis. Therefore refer to the Service Manual for K-Mechanical Chassis. (Order No. VRD9307M131)

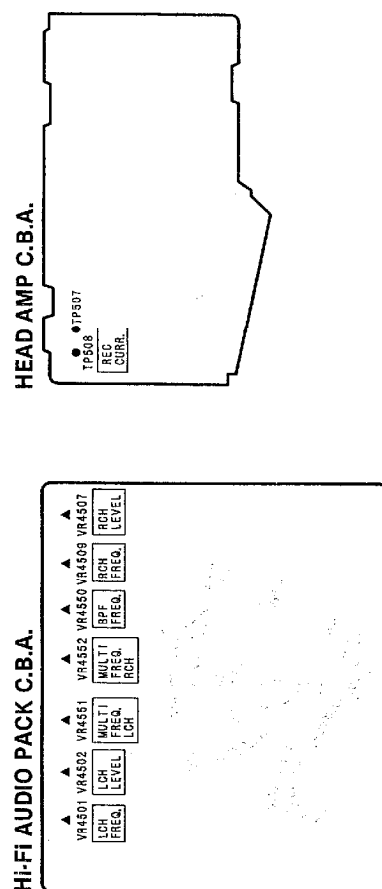
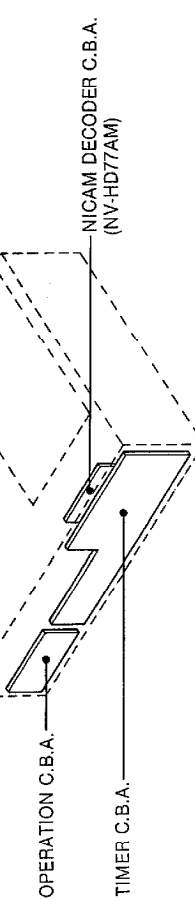
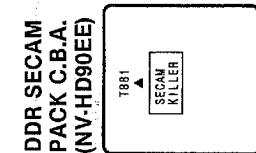
[illegible]

Diagram illustrating the components of the VHS Hi-Fi VCR deck, showing the exploded view of the main assembly and the internal components of the head drum unit.

Main Assembly Components:

- VW-VP55E (OPTION: NV-HD90EE)
- MAIN C B A
- TV DEMODULATOR PACK C B A
- DECODER PACK C B A
- HI-FI AUDIO PACK C B A
- NTSC RECORDING PACK C B A (NV-HD70AM, HD77AM)
- POWER C B A
- DDR SECAM PACK C B A (NV-HD90EE)
- LUMINANCE & CHROMINANCE PACK C B A
- HEAD AMP C B A
- OPERATION C.B.A.
- TIMER C.B.A.
- NICAM DECODER C.B.A. (NV-HD77AM)



2-5. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-5-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35 MHz)
Voltage Range: 0.005-5V/div
Frequency Range: DC-35MHz
Probes: 10:1 OR 1:1
2. Frequency Counter.
Frequency Range: 0-10MHz
Probes: 1:1
3. Universal Counter.
4. Vacuum Tube Volt Meter. (V.T.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-5-2. PREPARATION

During adjustment, set each selector as follows when no indication in the procedure.

TEST SIGNAL SW (REAR).....OFF
SIMUL SW (NV-HD70AM/HD77AM).....OFF
TAPE SPEED.....SP
NICAM/MONO SW (NV-HD77AM).....NICAM
3.58NTSC/4.43NTSC/PAL SW
(NV-HD70AM/HD77AM).....PAL
PAL/MESECAM SW.....PAL

2-5-3. HOW TO READ ADJUSTMENT PROCEDURES

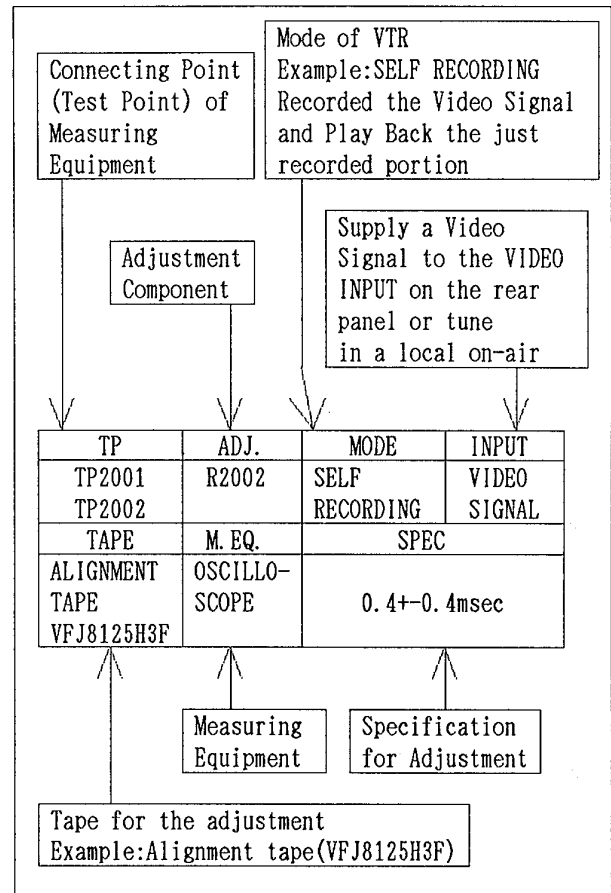


Fig. E1

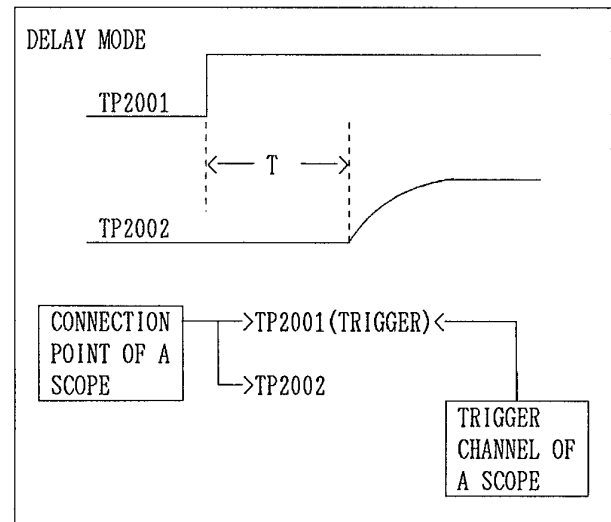


Fig. E2

SERVO SECTION

2-5-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 (TEST LAND) VIDEO OUT	VR2001	PLAYBACK	
TAPE	M. E Q.	SPEC	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO- SCOPE	7.0 $\pm$ 0.5(H)	

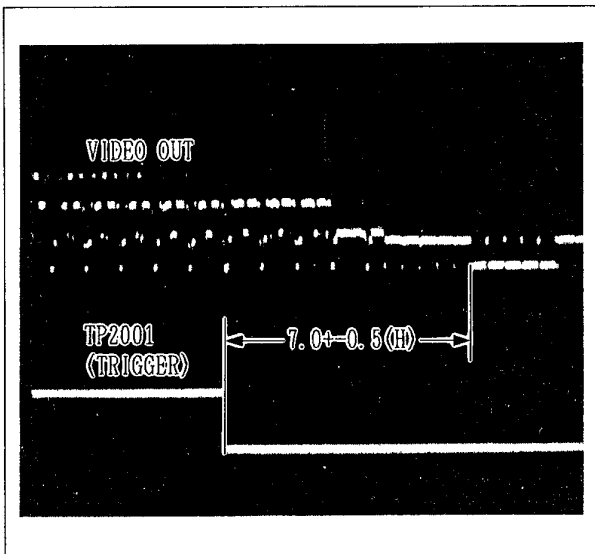


Fig. E3

2-5-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2011 (SP) VR2006 (LP)	(SELF RECORDED) SLOW	CCIR PATTERN
TAPE	M. E Q.	SPEC	
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)	

Note: 1. Before this adjustment, connect a jumper which has been cut as shown in Fig. E4.
2. After this adjustment, disconnect a jumper wire.

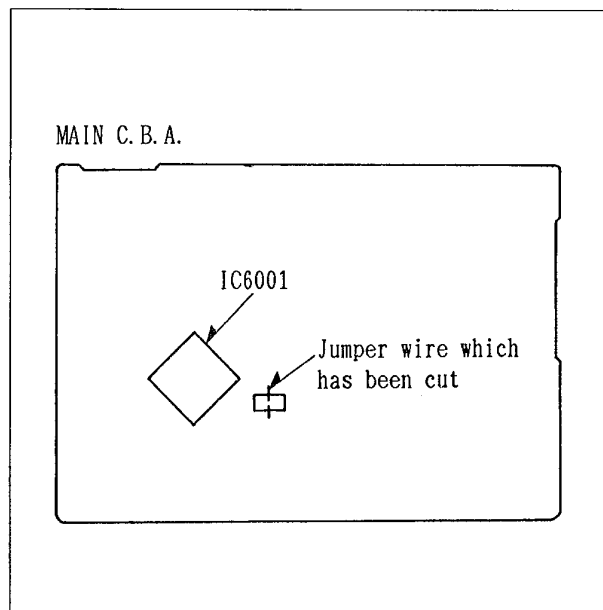


Fig. E4

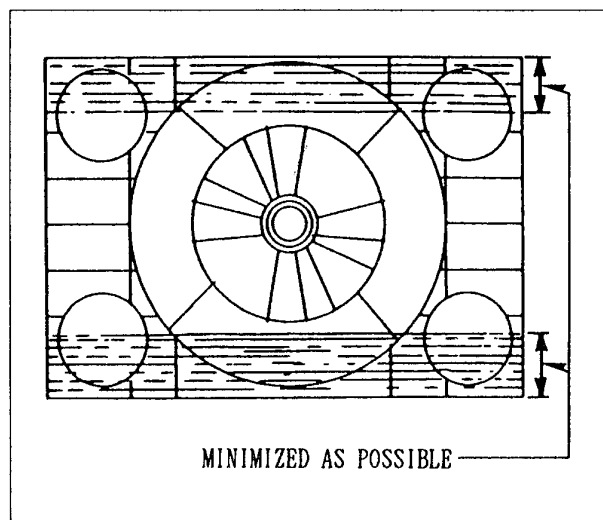


Fig. E5

LUMINANCE & CHROMINANCE SECTION

2-5-6 RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507(HOT)	VR3001(Y)	SP	PAL COLOUR
TP508(GND)	VR8001(C)	RECORDING	BAR
TAPE	M. E Q.	SPEC	
BLANK TAPE	OSCILLOSCOPE	Y=130+-5(mVp-p) C=32+-2 (mVp-p)	

Note:1. Adjust the Luminance level so that the peak level of V-SYNC is 130+-5mVp-p.

2. When adjusting the Chrominance level, Supply +5V DC to Pin 6 of PP3001 (TL3004) to eliminate Luminance component.

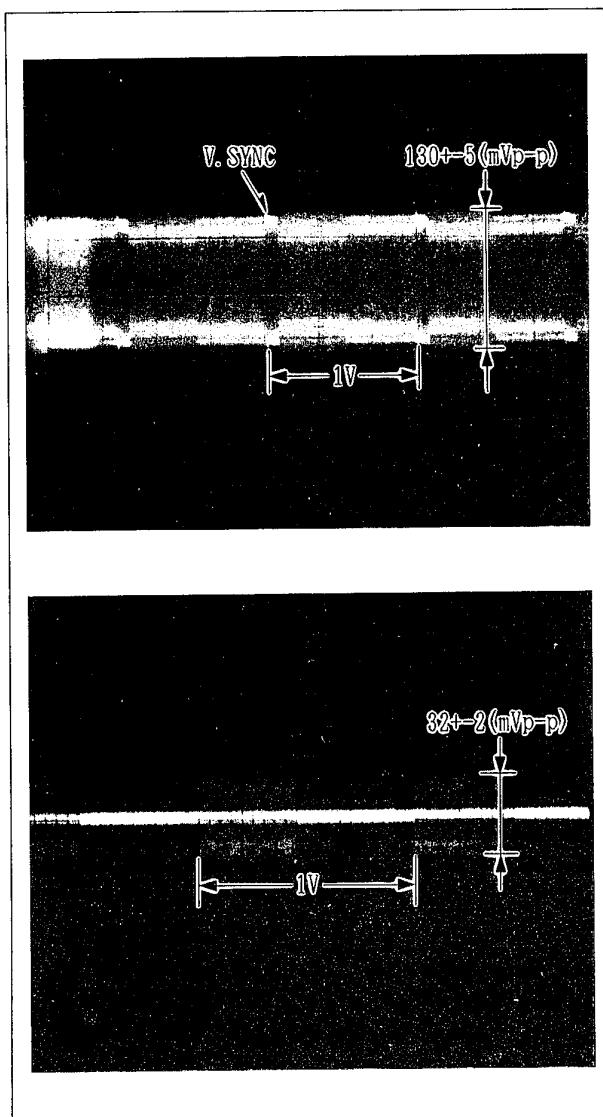


Fig. E6

2-5-7. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3012 (SP) VR3013 (LP)	SP/LP (SELF RECORDED) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)
TAPE	M. E Q.	SPEC	
BLANK TAPE	OSCILLOSCOPE/VIDEO SWEEP GENERATOR	SP: 0+-1(dB) (90-110%) LP: 0+-1(dB) (90-110%)	

Note:1. Set the Video Sweep Signal as shown in Fig. E7.

2. Supply 5.05+-0.15V DC to TL2033 through the resistor(1Kohm).

3. Supply 5.05+-0.15V DC to TL2034 through the resistor(68Kohm).

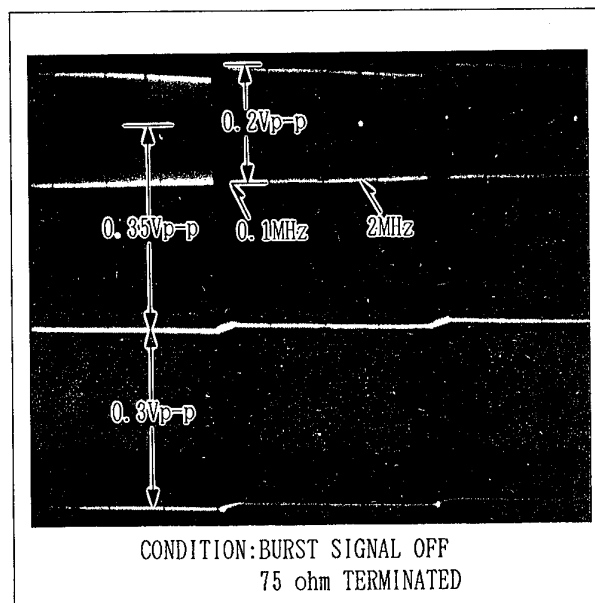


Fig. E7

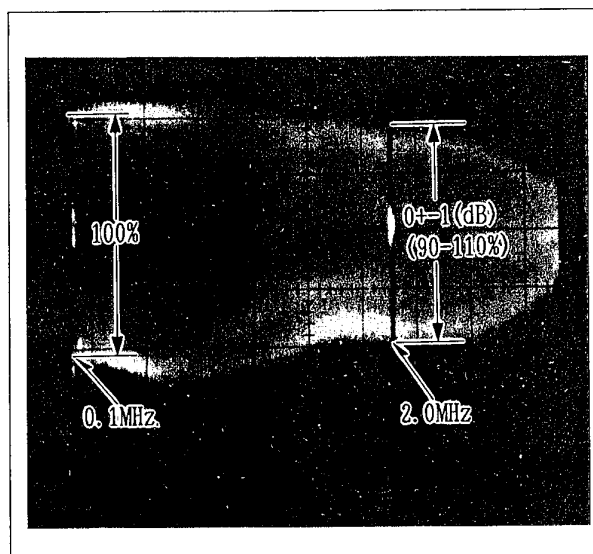


Fig. E8

2-5-8. CHROMINANCE RECURSIVE ADJUSTMENT
(NV-HD90EE)

TP	ADJ.	MODE	INPUT
IC301-17	VR801 VR802	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC	
BLANK TAPE	OSCILLO- SCOPE	MINIMIZE AMPLITUDE	

Note:1. Before this adjustment, RECORDING CURRENT ADJUSTMENT must be done.

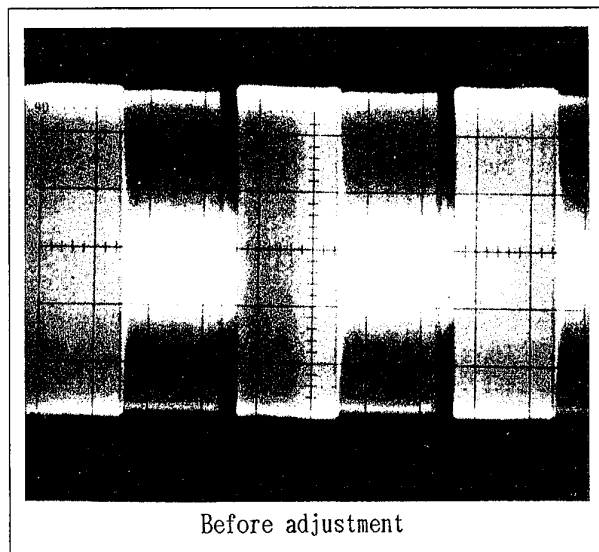


Fig. E9

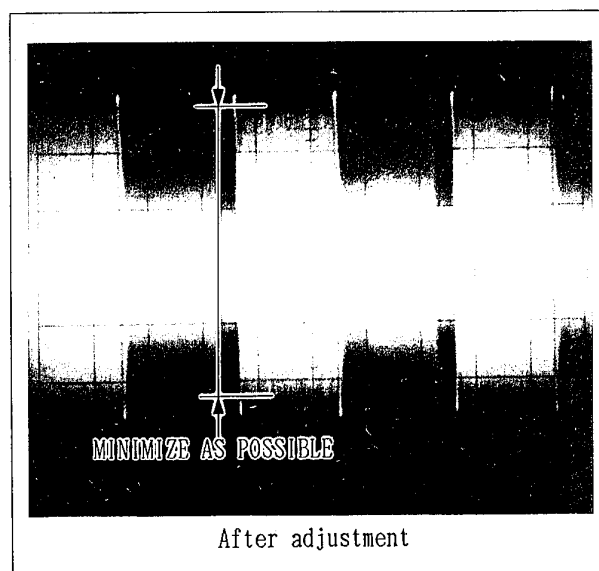


Fig. E10

2-5-9. ARTIFICIAL NTSC AFC FREE RUN ADJUSTMENT.

TP	ADJ.	MODE	INPUT
IC802-9	VR803	STOP	SINEWAVE (8KHz, -10dB) VIDEO IN
TAPE	M. EQ.	SPEC	
	OSCILLO- SCOPE/ SINEWAVE GENERATOR	15735+-100 (Hz)	

Note:1. Supply +5V DC to IC802-27.

2. Before adjusting VR803, turn VR803 clockwise or counter-clockwise which is maximum frequency side.

2-5-10. SECAM KILLER ADJUSTMENT
(NV-HD90EE)

TP	ADJ	MODE	INPUT
IC881-11	T881	SP RECORDING	SECAM COLOUR BAR
TAPE	M. EQ.	SPEC	
BLANK TAPE	OSCILLO- SCOPE	MINIMIZE AMPLITUDE ("A" PORTION: NEGATIVE PEAK)	

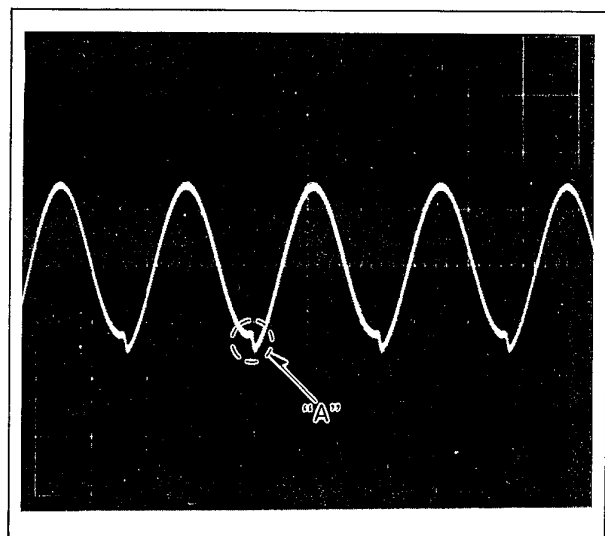


Fig. E11

AUDIO SECTION

2-5-11. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002(HOT/ TEST LAND)	VR4001	RECORDING	
TP4003(GND/ TEST LAND)			
TAPE	M. EQ.	SPEC	
BLANK TAPE	V. T. V. M.	2.4±0.1(mVrms)	

Note:1. Connect the Audio Input and GND.

2-5-12. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501- 34 (L) (TL4515)	VR4551 (P-L) VR4552 (P-R) VR4501 (N-L)	SP RECORDING	
IC4501- 47 (R) (TL4516)	VR4509 (N-R)		
TAPE	M. E Q.	SPEC	
BLANK TAPE	FREQUENCY COUNTER	PAL-L: 1.4+-.003 (MHz) PAL-R: 1.8+-.003 (MHz) NTSC-L: 1.3+-.003 (MHz) NTSC-R: 1.7+-.003 (MHz)	

Note:1. When adjusting VR4501 and VR4509, connect a jumper wire between IC6001-70 and GND (compulsory NTSC mode)

2. After adjusting VR4501 and VR4509, disconnect a jumper wire.

2-5-13. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511(L)	VR4502(L)	SP RECORDING	SINEWAVE (1KHz, -10dB)
BETWEEN VR4507 and R4561(R)	VR4507(R)		
			AUDIO IN (L), (R)
TAPE	M. E Q.	SPEC	
BLANK TAPE	V. T. V. M. / SINEWAVE GENERATOR	120(mVrms)	

Note:1. Before recording the sinewave, set the Signal Generator until the both audio outputs (L) and (R) are 400mVrms.

2-5-14. FM B. P. F. ADJUSTMENT

T P	A D J .	M O D E	I N P U T
IC4501- 33 (L) (TL4517) IC4501- 48 (R) (TL4518)	VR4550	PLAYBACK	1.608MHz/ 400mVp-p SINEWAVE SIGNAL (PS4003-8)
T A P E	M. E. Q.	S P E C	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO- SCOPE/ SINEWAVE GENERATOR	Lch(IC4501-33) = Rch(IC4501-48)	

Note:1. Disconnect P501(from Main C.B.A. to Head Amp Pack)

2. Supply the sinewave signal (1.608MHz/ 400mVp-p) to PS4003-8.

3 After this adjustment, connect P501

TIMER SECTION

2-5-15. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT	
TL7501	C7501	STOP		
TAPE	M. E. Q.	SPEC		
	UNIVERSAL COUNTER	7812.5+−0.015(usec)		

Memo

SECTION 3 BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC ①	BIL. [H]	BILINGUAL ⑥
A. COMP	AUDIO COMPONENT SIGNAL	BIL/M1 [L]	BILINGUAL ①
A. COMPO	AUDIO COMPONENT SIGNAL	BS CLOCK	BS CLOCK
A. D.P [L]	AUDIO DUBBING PAUSE ①	BS DATA	BS DATA
A. D/L [L]	AUDIO DUBBING PAUSE ①	BS LCH IN	BS L CHANNEL INPUT
A. DEF [S]	AUDIO DEFEAT	BS MIX [H]	BS MIX ⑥
A. DEF [S] [L]	AUDIO DEFEAT	BS MON [H]	BS MONITOR ⑥
A. DUB P [L]	AUDIO DUBBING PAUSE ①	BS MONI [H]	BS MONITOR ⑥
A. DUB [H]	AUDIO DUBBING ⑥	BS RCH IN	BS R CHANNEL INPUT
A. ERASE	AUDIO ERASE	BS VIDEO	BS VIDEO SIGNAL
A. H. SW	AUDIO HEAD SWITCHING PULSE	BS VIDEO/BS1	BS VIDEO SIGNAL
A. HEAD [R]	AUDIO HEAD (REC)	BS [H]	BS ⑥
A. HEAD [W]	AUDIO HEAD (PLAY)	BS. LEVEL	BS LEVEL
A. IN [L]	AUDIO INPUT (L)	BS. M [H]	BS MONITOR ⑥
A. IN [R]	AUDIO INPUT (R)	BS/VTR [H]	BS/VTR ⑥
A. MUT [H]	AUDIO MUTE ⑥	BUS CLK	BUS CLOCK
A. MUTE [H]	AUDIO MUTE ⑥	BUS LSN	BUS LISTEN
A. OUT [L]	AUDIO OUTPUT (L)	BUS TLK	BUS TALK
A. OUT [R]	AUDIO OUTPUT (R)	BUZZER	BUZZER
A. RF OUT	AUDIO RF SIGNAL OUTPUT	CAP EC	CAPSTAN TORQUE CONTROL
A/VS/S. DATA	AV SW/SERIAL DATA	CAP M GND	CAPSTAN MOTOR GND
AC ONLINE	AC ONLINE	CAP. ET	CAPSTAN TORQUE CONTROL
AC. O/EE. H	AC ONLINE/EE ⑥	CAP. FG1	CAPSTAN FG1 PULSE
AFC S C	AFC S CURVE	CAP. FG2	CAPSTAN FG2 PULSE
AFC [S]	AFC S CURVE	CAS. SW	CASSETTE SW
AFC. DEF	AFC DEFEAT	CCN	PLAYBACK CONTROL SIGNAL (-)
ARFC OUT	AUDIO RF SIGNAL OUTPUT	CCP	PLAYBACK CONTROL SIGNAL (+)
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL	CHM	CONTROL SIGNAL (+)
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI	CHP	CONTROL SIGNAL (-)
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL ⑥/NORMAL	CINEM [L]	CINEMA ①
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL	CINEMA [L]	CINEMA ①
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE	CINEMA/MIX	CINEMA/MIX
AUDIO IN [L]	AUDIO INPUT (L)	CKL	RATCH LOCK
AUDIO IN [R]	AUDIO INPUT (R)	CKS	SHIFT LOCK
AUDIO OUT [L]	AUDIO OUTPUT (L)	CL	CLOCK
AUDIO OUT [R]	AUDIO OUTPUT (R)	CLK	CLOCK
AUDIO SELECT [H]	AUDIO SELECT ⑥	CLK (C.G)	CLOCK
AUDIO. L	AUDIO (L)	CLOCK. IN	CLOCK INPUT
AUDIO. R	AUDIO (R)	CLP	CLAMP
AV CNT	AV CONTROL	COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
AV CTL	AV CONTROL	COLOR [H]	COLOUR ⑥
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK	CONV	CONVERTOR
AV. C.M.	AV CONTROL MODE	CS	CHIP SELECT
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)	CTL GND	CONTROL GND
AVSW/METER. L	AV SW/LEVEL METER (L)	CTL HEAD [+]	CONTROL HEAD (+)
B MODE. H	B MODE ⑥	CTL HEAD [-]	CONTROL HEAD (-)
B.G.P	BURST GATE PULSE	CTL [+]	CONTROL HEAD (+)
BACKUP 5V	BACK UP 5V	CTL [-]	CONTROL HEAD (-)
BAND. U.E.	BAND U	CUE BIAS	CUE BIAS
BANDVL. D	BAND VL	CURRENT LIM	CURRENT LIMMETER
BI/MI [L]	BILINGUAL/MIX ①	CYL ET	CYLINDER TORQUE CONTROL
BIL	BILINGUAL	CYL GND	CYLINDER GND
BIL [L]	BILINGUAL ①	D.F.M. REC [H]	DELAIED FM RECORDING ⑥
		D. FM REC [L]	DELAIED FM RECORDING ①
		D. GND	DIGITAL GND

ABBREVIATIONS

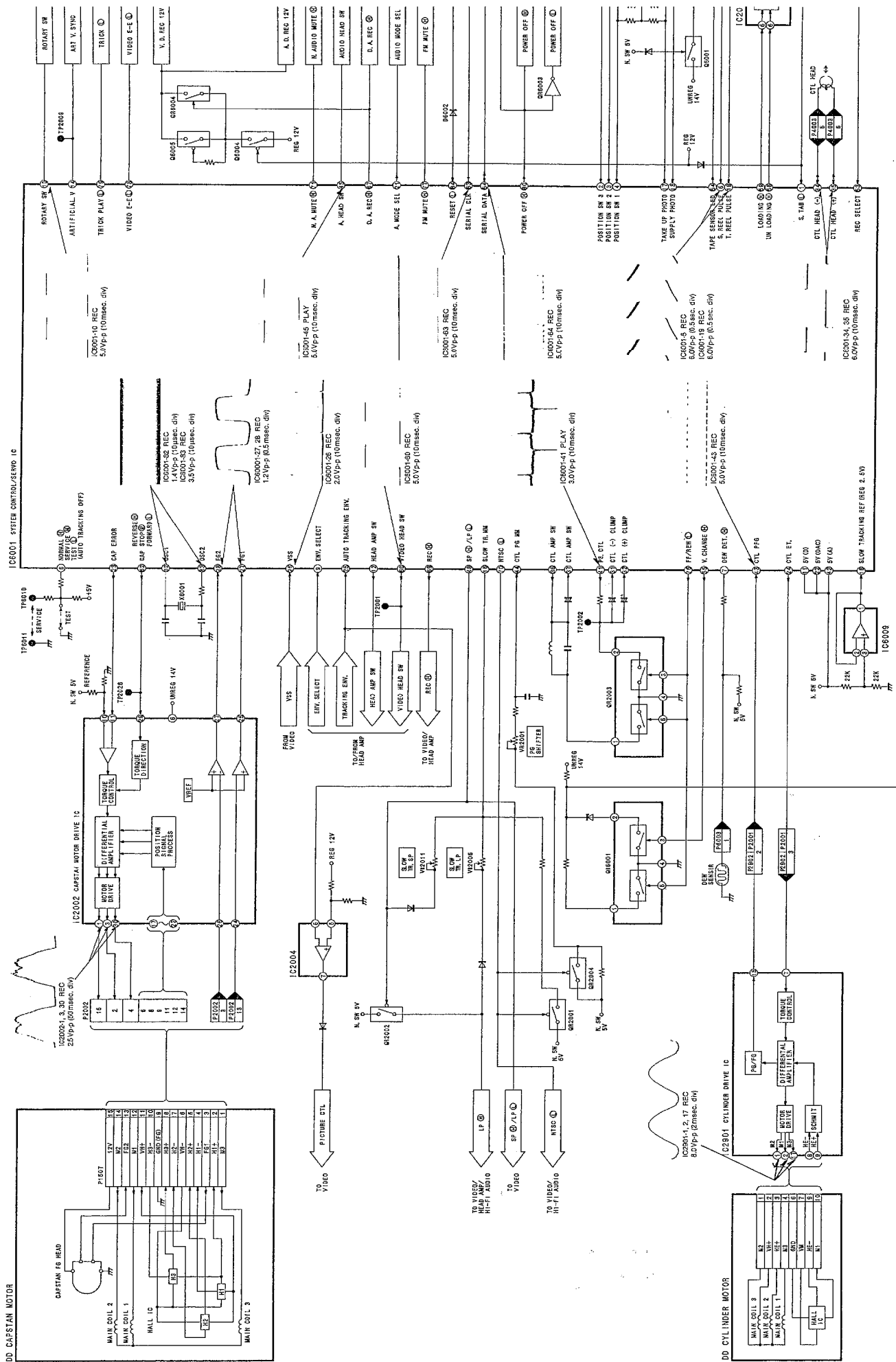
D. REC [H]	DELAYED RECORDING ⑥	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING ⑥	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING ⑥	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [-]	HEATER (-)
EC	ERROR TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL	HTR [+]	HEATER (+)
	REFERENCE VOLTAGE	HTR [-]	HEATER (-)
EDT TRIG [L]	EDIT TRIGGER ①	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT ⑥	ICL	CONTROL AGC CIRCUIT
EE [H]	EE ⑥	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE ⑥/INSERT ⑥	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	INS L/R [L]	INSERT Lch/Rch ①
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT ⑥
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP ⑥	INSERT [H]	INSERT ⑥
EP/LP [H]	LP ⑥	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP ⑥	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB ⑥
FF/REW [L]	FIRST FORWARD/REWIND ①	JST. CLOCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMEN	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON ⑥	L. CH [H]	Lch ⑥
FLY ON [H]	FLYING ERASE E HEAD ON ⑥	L. CH [L]	Lch ①
FLY. E [H]	FLYING ERASE HEAD ON ⑥	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE ⑥	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE ⑥	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON ⑥	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON ⑥	LINE IN [L]	LINE INPUT (L)
FULL. E. 12V	FULL ERASE 12V	LINE IN [R]	LINE INPUT (R)
GND [A]	GND (ANALOGUE)	LINE OUT [L]	LINE OUTPUT (L)
GND [TU]	GND (TUNER)	LINE OUT [R]	LINE OUTPUT (R)
GND/N. SW. 12V	GND/NON SW 12V	LP [H]	LP ⑥

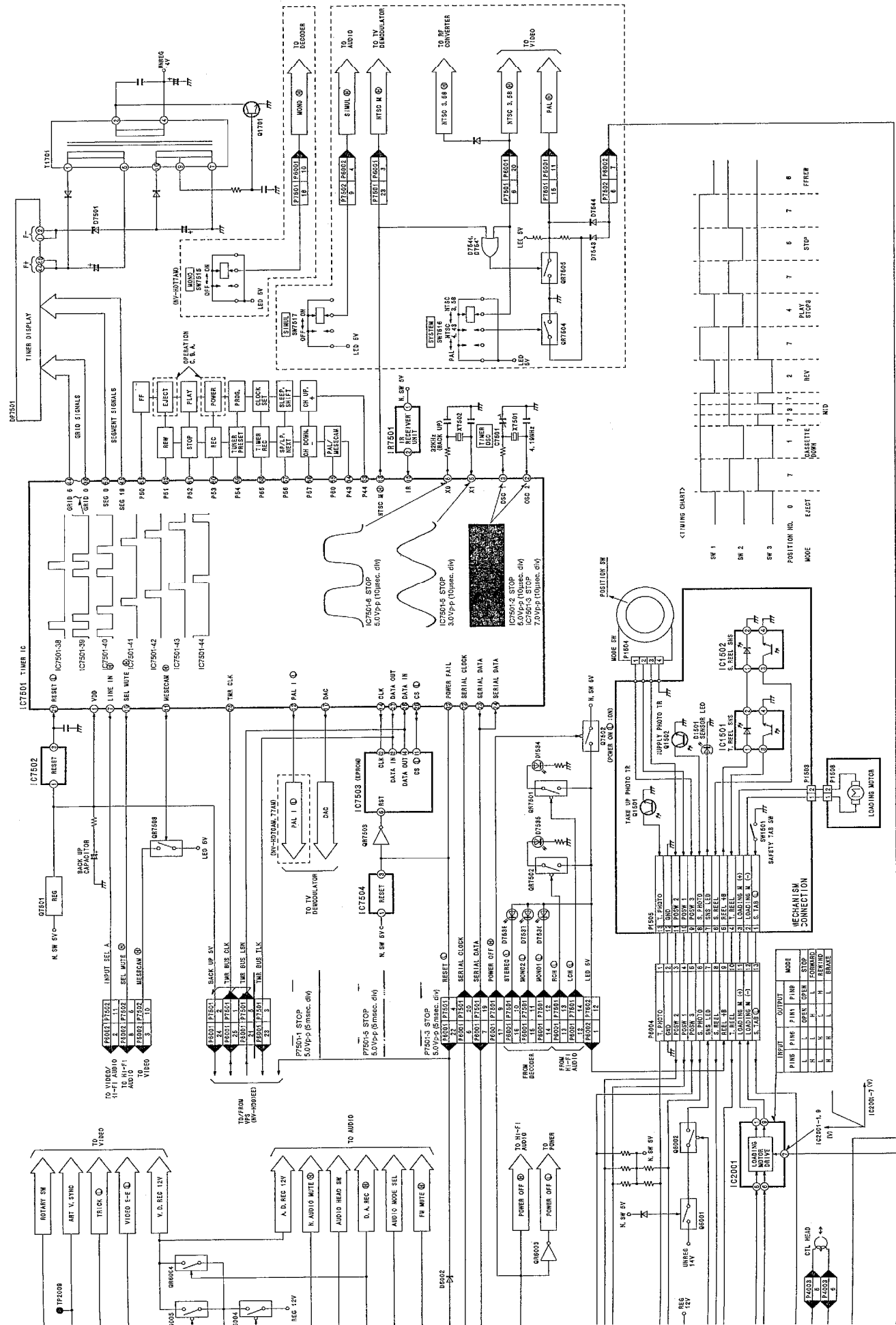
LPTRI [L]	LP TRICK PLAY ①	P. OFF [L]	POWER OFF ①
Lch/A. DUB	Lch/AUDIO DUBBING	PAL [H]	PAL ②
M GND	MOTOR GND	PAL [L]/NTSC [H]	PAL ①/NTSC ②
M REG	MOTOR REGULATOR	PB ADJ OUT	PLAYBACK ADJUST OUTPUT
MAIN OUT	MAIN OUTPUT	PB OUT	PLAYBACK OUTPUT
MAIN [L]	MAIN ①	PB. H	PLAYBACK ②
MAIN/MONO	MAIN/MONAUURAL	PFG	PG/FG
MAX IN	MAXIMAM INPUT	PHOTSN +B	PHOTO SENSOR +B
MES [H]	MESECAM ②	PICT. CNT	PICTURE CONTROL
MESE [H]	MESECAM ②	PLAY LED/RVS LED	PLAY LED/REVERSE LED
MESE [L]	MESECAM ①	PLAY. PO	PLAY POSITION
METER 5V	LEVEL METER 5V	PLAY/R. LED	PLAY LED/REVERSE LED
METER [L]	LEVEL METER (L)	PLY/DEW	PLAY/DEW ②
METER [R]	LEVEL METER (R)	POWER OFF [L]	POWER OFF ①
METER. L/AVS	LEVEL METER (L)	PREROLL [H]	PREROLL ②
METER. R/AVC	LEVEL METER (R)	PWRFAIL	POWER FAILURE DETECT
MI/BI [L]	MIX ②/BILIGUAL	R. CH [H]	Rch ②
MIC GND	MIC GND	R. CH [L]	Rch ①
MIC IN	MIC INPUT	R. ST	RESET
MIC IN [L]	MIC INPUT (L)	R/S/F	REVERSE ②/STOP ③/FORWARD ①
MIC IN [R]	MIC INPUT (R)	RCH [H]	Rch ②
MIC [H]	MIC ②	REC 12V	RECORDING 12V
MIX [H]	MIX ②	REC CHROMA	RECORDING CHROMINANCE SIGNAL
MIX [H]/CINEMA [L]	MIX ②/CINEMA SOUND ①	REC H	RECORDING ②
MIX/CINE	MIX ②/CINEMA SOUND ①	REC IN	RECORDING INPUT
MIX/CINEMA [L]	MIX ②/CINEMA SOUND ①	REC OUT [L]	RECORDING OUTPUT ①
MN. H/M. L	MONAURAL ②/MAIN ①	REC START	RECORDING START
MN. H/MAI. L	MONAURAL ②/MAIN ①	REC VR [C]	RECORDING VOLUME (COMMON)
MN2/MES. L	MONAURAL 2/MESECAM ①	REC VR [L]	RECORDING VOLUME (L)
MODE SEL	AUDIO MODE SELECT	REC VR [R]	RECORDING VOLUME (R)
MODE SW	AUDIO MODE SW	REC Y	RECORDING LUMINANCE SIGNAL
MODE. S. IN	AUDIO MODE SELECT INPUT	REC [H]	RECORDING ②
MODE. S. OUT	AUDIO MODE SELECT OUTPUT	REC. C	RECORDING CHROMINANCE SIGNAL
MONO [H]	MONAURAL ②	REC. Y	RECORDING LUMINANCE SIGNAL
MONO [H]/MAIN [L]	MONAURAL ②/MAIN ①	REC/EE CTL	RECORDING/EE CONTROL
MONO2 [L]	MONAURAL-2	REEL-T	REEL PULSE (TAKE-UP)
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM ①)	REEL-S	REEL PULSE (SUPPLY)
MOTOR GND	MOTOR GND	REGULATOR FILTER	REGULATOR FILTER
MUTE	MUTE	RESET	RESET
N. A. REC [L]	NORMAL AUDIO RECORDING	REV M F/R	REVIEW MOTOR
N. SW 12V	NON SW 12V	REV M V1	FORWARD/REVERSE
N. SW. 5. DET	NON SW 5V DETECT	REV M V2	REVIEW MOTOR V1
NICAM	NICAM	REV MOTOR F/R	REVIEW MOTOR V2
NICAM [L]	NICAM ①		REVIEW MOTOR
NOL [H]	PAL ②/4.43 NTSC ③/3.58 NTSC ①		FORWARD/REVERSE
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY ②	REV MOTOR V1	REVIEW MOROR V1
NORMAL [H]	NORMAL ②	REV MOTOR V2	REVIEW MOTOR V2
NR BIAS	NR BIAS	REV MOTOR [+]	REVIEW MOTOR (+)
NTSC [L]	NTSC ①	REV MOTOR [-]	REVIEW MOTOR (-)
OCH	CONTROL AGC CIRCUIT	REV. M. GND	REVIEW MOTOR GND
OUT	OUTPUT	RF. CHROMA	RF CHROMINANCE SIGNAL
P-OFF [H]	POWER OFF ②	RF OUT	RF OUTPUT
P-OFF [L]	POWER OFF ①	RF Y	RF LUMINANCE SIGNAL
P. FAIL	POWER FAILURE DETECT	RF. Y. IN	RF LUMINANCE SIGNAL INPUT
P. OFF [H]	POWER OFF ②	RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ABBREVIATIONS

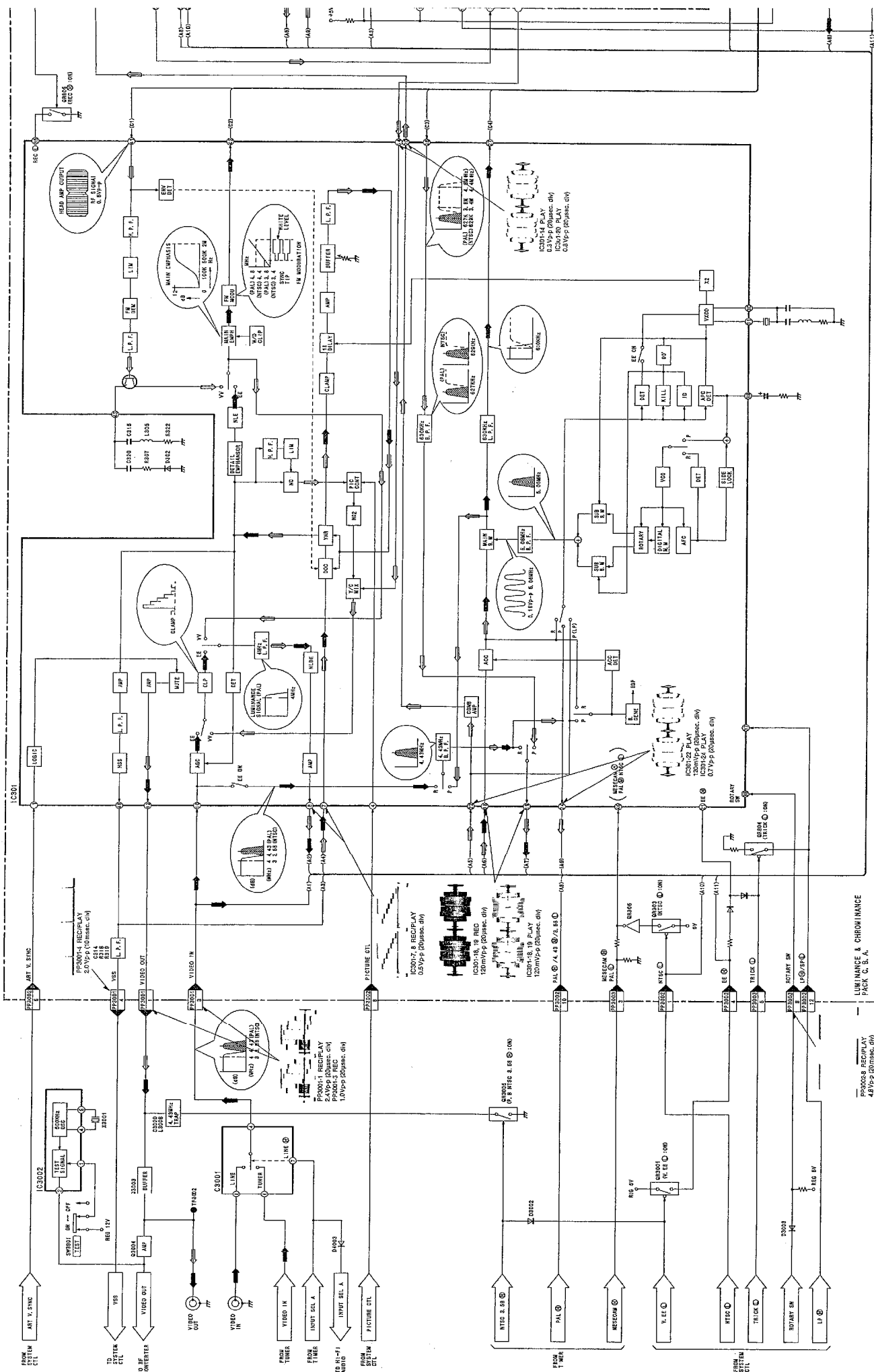
ROTAR. SW	ROTARY SW	T. BUSCLK	TIMER BUS CLOCK
ROTARY	ROTARY SW	T. BUSLSN	TIMER BUS LISTEN
RST	RESET	T. BUSTLK	TIMER BUS TALK
RST [L]	RESET ①	T. END [L]	TAPE END ①
Rch/INST	Rch/INSERT	T. PHOTO	TAKE-UP PHOTO TRANSISTOR
S IN	SERIAL DATA INPUT	TAPE END [L]	TAPE END ①
S OUT	SERIAL DATA OUTPUT	TAPE END [L]/CAM	TAPE END ①/CAMERA PAUSE
S-PHOTO	SUPPLY PHOTO TRANSISTOR	TEST	TEST MODE
S-RL. PLS	SUPPLY REEL PULSE	TPZ	TRAPEZOIDAL WAVE CIRCUIT
S. CLK	SERIAL CLOCK	TRIC [L]	TRIC PLAY ①
S. CLK/AV	SERIAL CLOCK/AV	TRICK [L]	TRIC PLAY ①
S. DATA	SERIAL DATA	TRK. ENV	AUTO TRACKING ENVELOPE DETECT
S. DATA/A	SERIAL DATA	TU. AUDIO	TUNER AUDIO
S. PHOTO	SUPPLY PHOTO TRANSISTOR	TU. GND	TUNER GND
S. TAB [L]	SAFETY TAB SW ON ①	TU. V. IN	TUNER VIDEO SIGNAL INPUT
S/P/N	SECAM/PAL/NTSC	TU. VIDEO	TUNER VIDEO
SC IN	SERIAL CLOCK INPUT	TUN NOR IN	TUNER NORMAL INPUT
SC OUT	SERIAL CLOCK OUTPUT	TUN R	TUNER AUDIO (R)
SCK SELECT	SERIAL CLOCK SELECT	TUN. AUDIO IN	TUNER AUDIO INPUT
SEL OUT [L]	SELECT OUTPUT (L)	TUNER 12V	TUNER 12V
SEL OUT [R]	SELECT OUTPUT (R)	TUNER L	TUNER AUDIO (L)
SHUTTLE 1	SHUTTLE 1	TUNER V IN	TUNER VIDEO SIGNAL INPUT
SIF	SOUND INTERMEDIATE FREQUENCY	TUNER [L]	TUNER AUDIO (L)
SLMUT [H]	INPUT SELECT MUTE ⑥	TUNER [N]	TUNER AUDIO (NORMAL)
SLNID [+]	SOLENOID (+)	TUNER [R]	TUNER AUDIO (R)
SLNID [-]	SOLENOID (-)	TUNER. 12	TUNER 12V
SLW TR. MM	SLOW TRACKING MONO MULTI	TUOFF [H]	TUNER OFF ⑥
SLW TR. REF	SLOW TRACKING REFERENCE	TV. AUDIO	TV AUDIO
	VOLTAGE	TV/VTR	TV/VTR
SNS. GND	SENSOR GND	TXTON [L]	TEXT ON ①
SOFT [H]	SOFT TAPE PLAY ⑥	U. REG45V	UNREGULATOR 45V
SOFT [H]/NORMAL	SOFT TAPE PLAY ⑥/NORMAL ⑥	UNREG	UNREGULATOR
SOLENOID ON [L]	SOLENOID ON ①	UNREG19V	UNREGULATOR 19V
SP [H]	SP ⑥	V. REF	REFERENCE VOLTAGE
SP/L/SLP	SP/LP	V. EE [H]	VIDEO EE ⑥
SSS [L]	SLOW/STILL/STOP	V. EE [L]	VIDEO EE ①
STEREO LED	STEREO LED	VCO REF	REFERENCE OSCILLATOR
STEREO [H]	STEREO ⑥	VD. IN	VIDEO SIGNAL INPUT
STEREO [L]	STEREO ①	VD. OUT	VIDEO SIGNAL OUTPUT
STOP. PO	STOP POSITION	VIDEO EE [L]	VIDEO EE ①
STOP/5V	STOP POSITION/5V	VIDEO IN	VIDEO SIGNAL INPUT
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT	VIDEO OUT	VIDEO SIGNAL OUTPUT
STOP1/PAL:ST	STOP1 POSITION/PAL	VM	MOTOR VOLTAGE
STOP2. PO	STOP 2 POSITION	VM DOWN [L]	MOTOR VOLTAGE DOWN ①
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW	VSS	VERTICAL SYNC SIGNAL
STREO [H]	STEREO ⑥	VTR [H]	VTR ⑥
SUB BIAS	SUB BIAS	VTR. 12V	VTR 12V
SUB. SW	SUB SW	X IN	OSCILLATOR INPUT
SVHS CAS [L]	S-VHS CASSETTE ①	X OUT	OSCILLATOR OUTPUT
SW. 5. DET	SW 5V DETECT		
SYNC [L]	SYNC ①		
SYSCON 5V	SYSTEM CONTROL 5V		
SYSTEM	SYSTEM SW		
T-PHOTO	TAKE-UP PHOTO TRANSISTOR		
T-RL. PLS	TAKE-UP REEL PULSE		

3-2. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

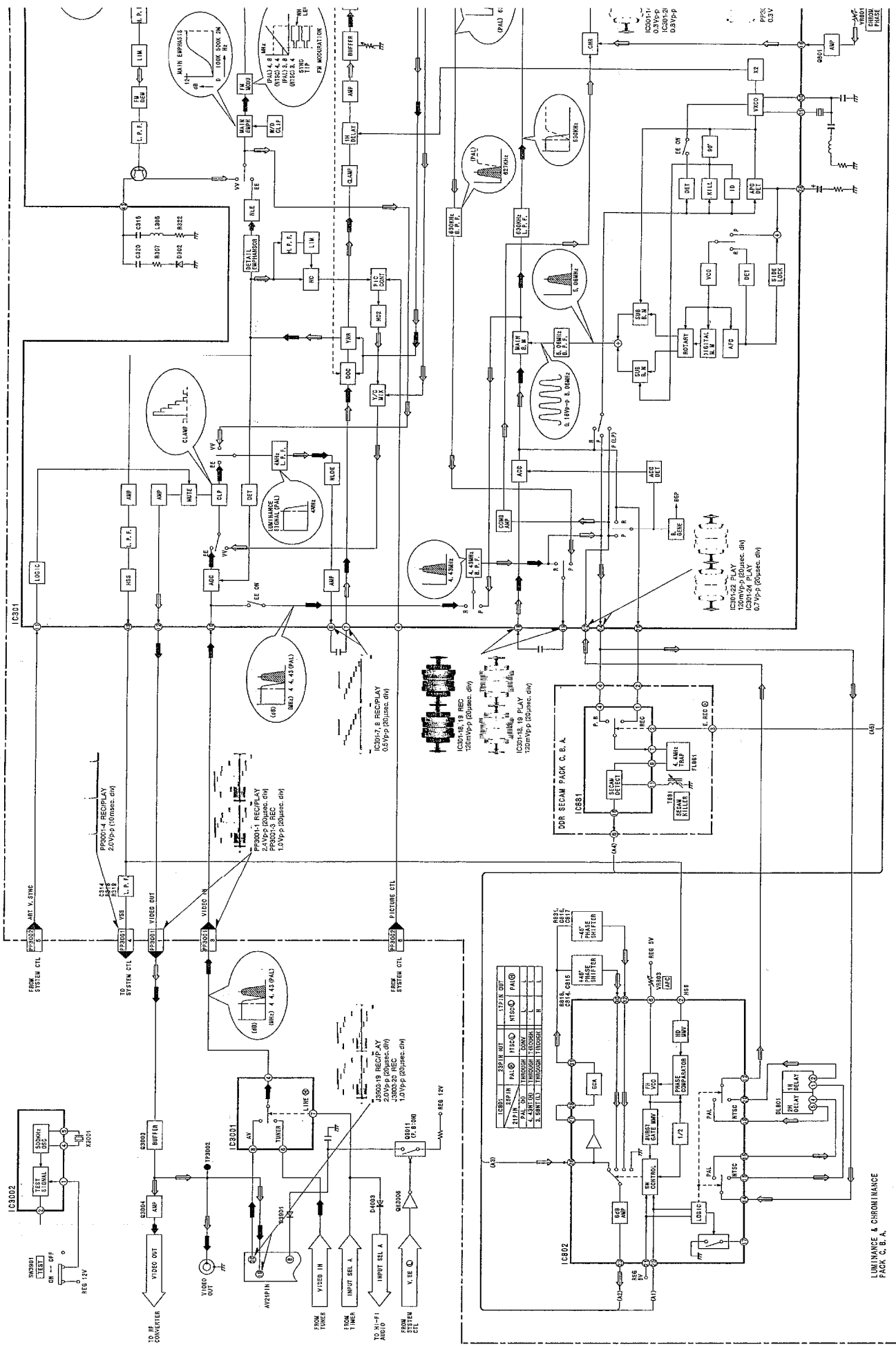




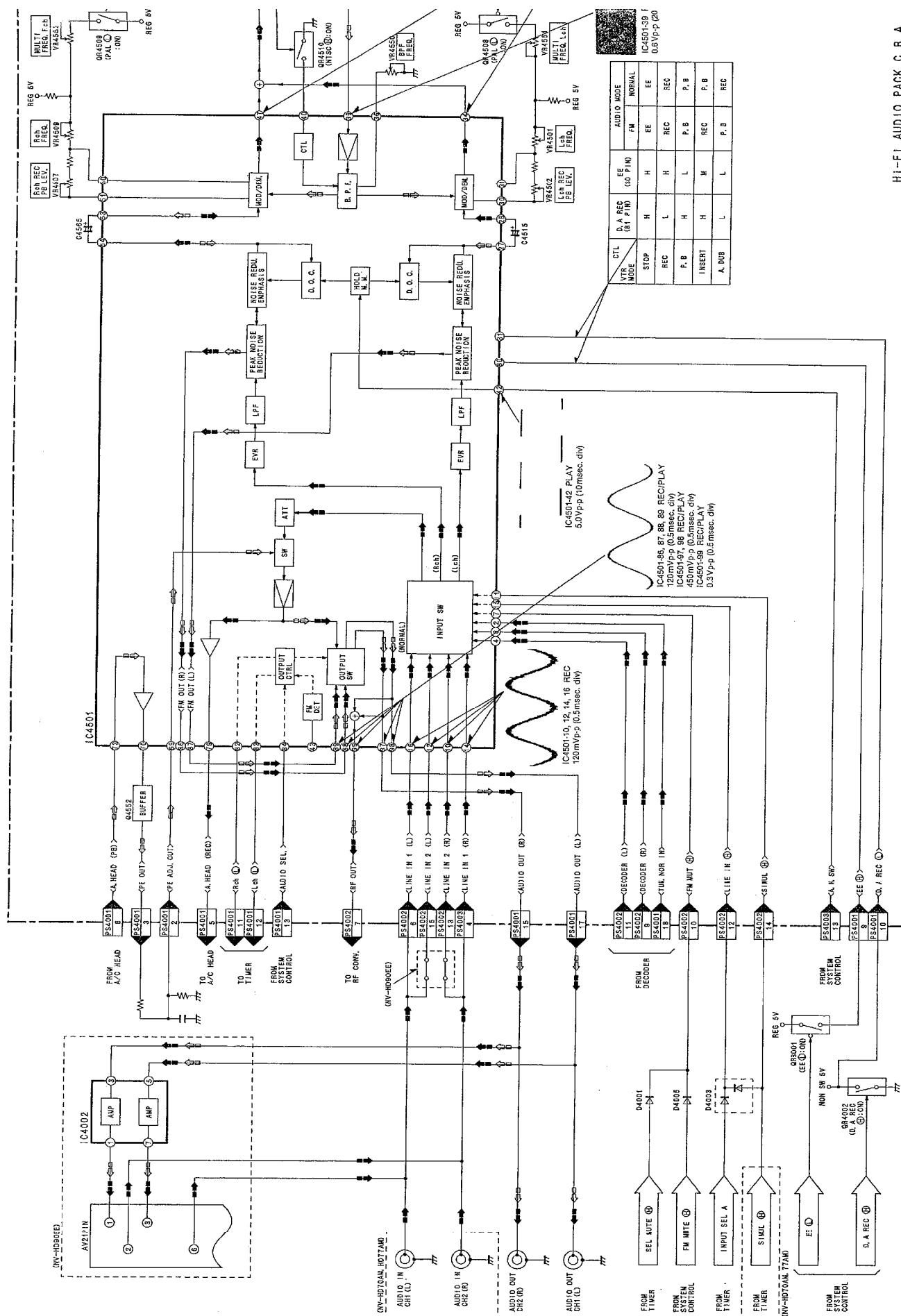
3-3-3 LUMINANCE & CHROMINANCE BLOCK DIAGRAM (NV:HD70AM, HD77AM)



3-4 LUMINANCE & CHROMINANCE BLOCK DIAGRAM (NV-HD90EE)

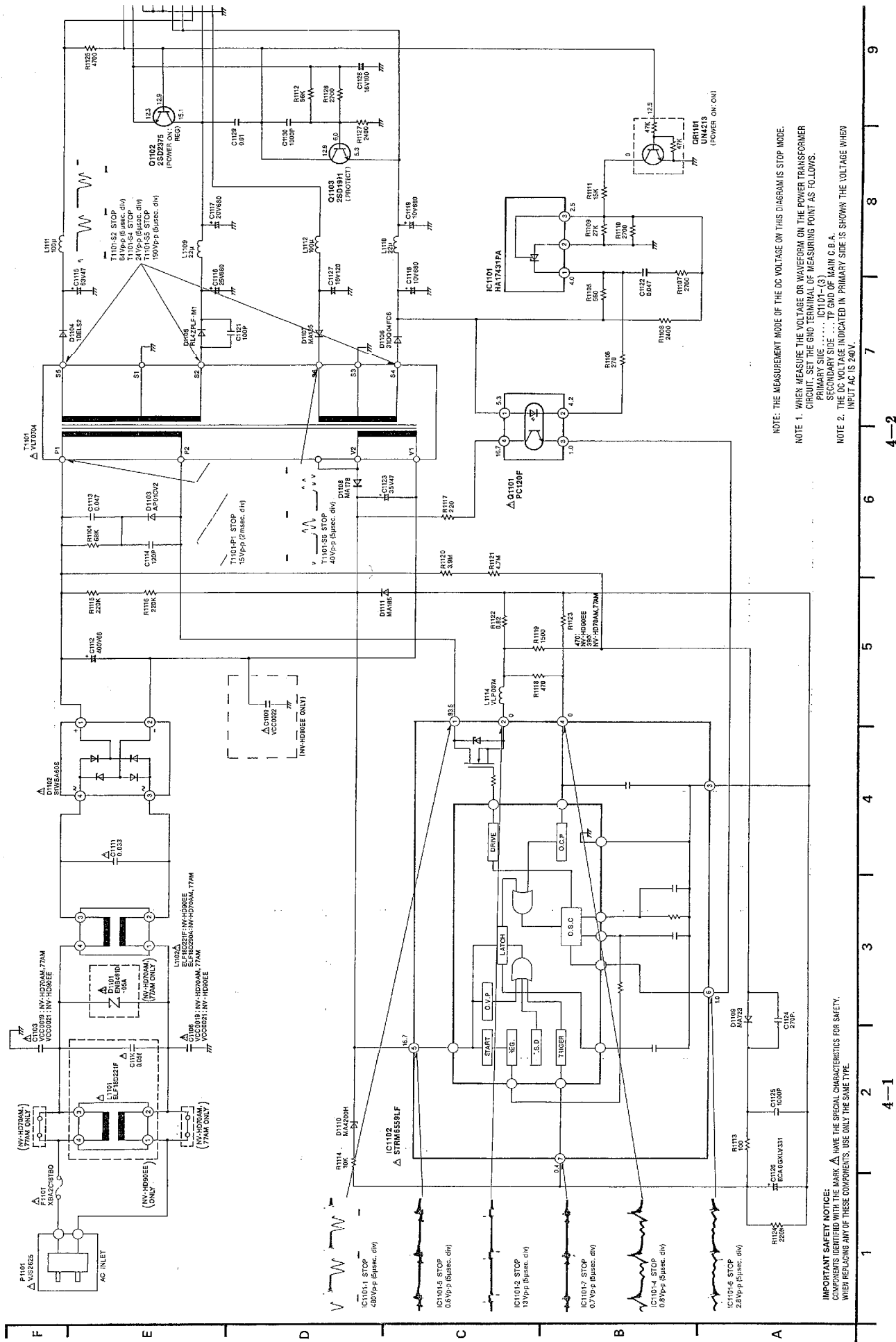


3-3-5. HI-FI AUDIO BLOCK DIAGRAM

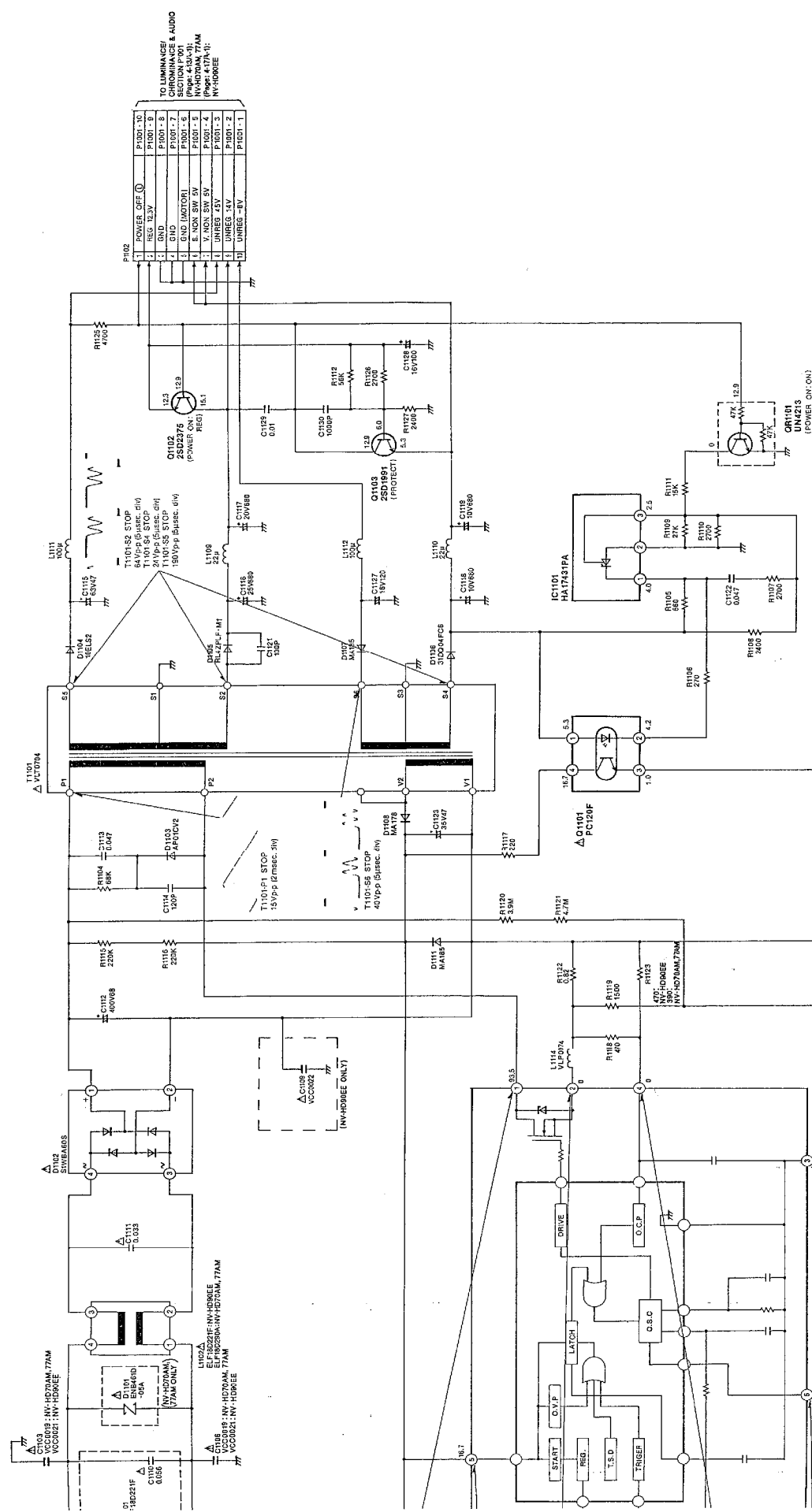


SECTION 4 SCHEMATIC DIAGRAMS

4-1 POWER SCHEMATIC DIAGRAM



CON 4 DIAGRAMS DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.

PRIMARY SIDE IC1101-(73)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN
INPUT AC IS 240V.

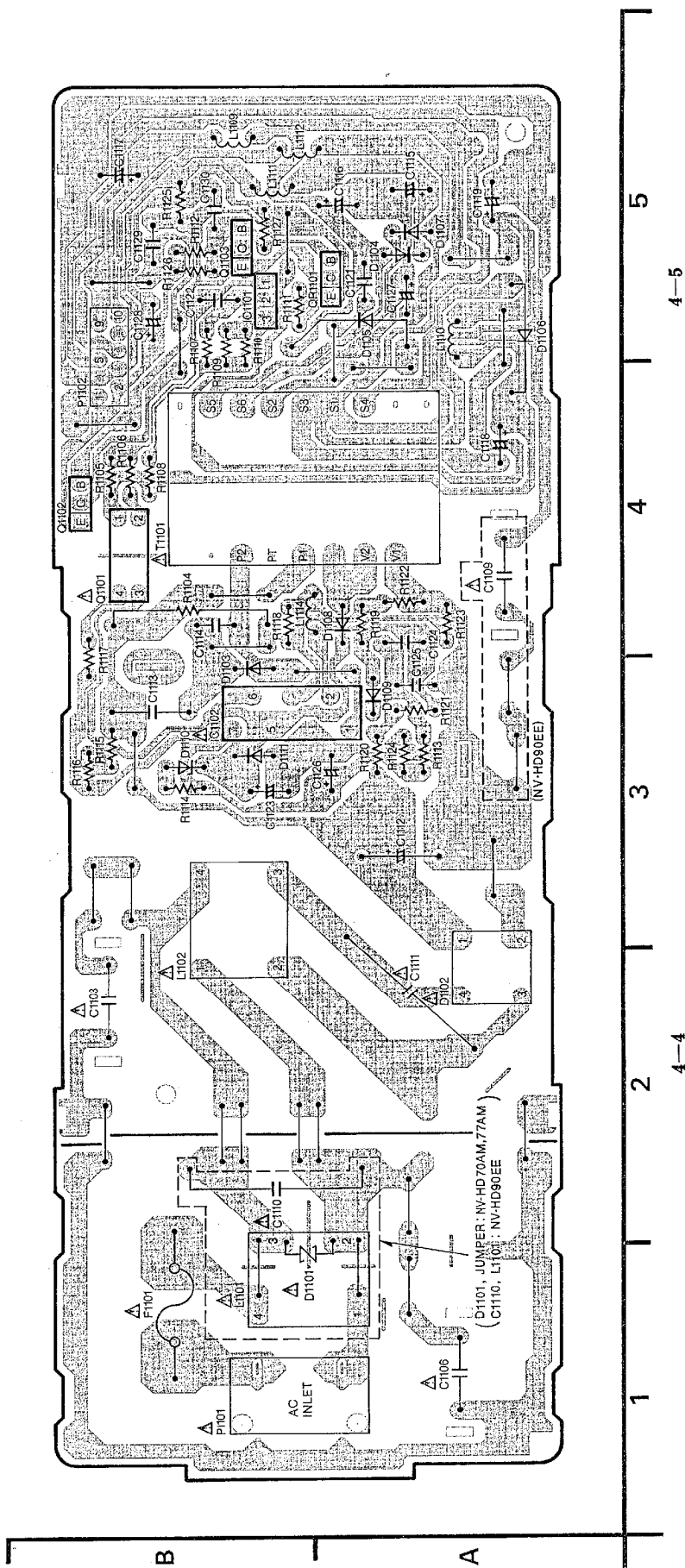
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

CHARACTERISTICS FOR SAFETY.
AE TYPE.

4-2 POWER C.B.A (VEP01587F: NV-HD70AM, HD77AM) (VEP01587D: NV-HD90EE)

POWER C.B.A.	
Transistor	
Q1101	B-4
Q1102	B-4
Q1103	B-5
Translator & Resistor	
QR1101	A-5
Integrated Circuit	
IC1101	B-5
IC1102	B-3
Connector	
P1101	B-1
P1102	B-4

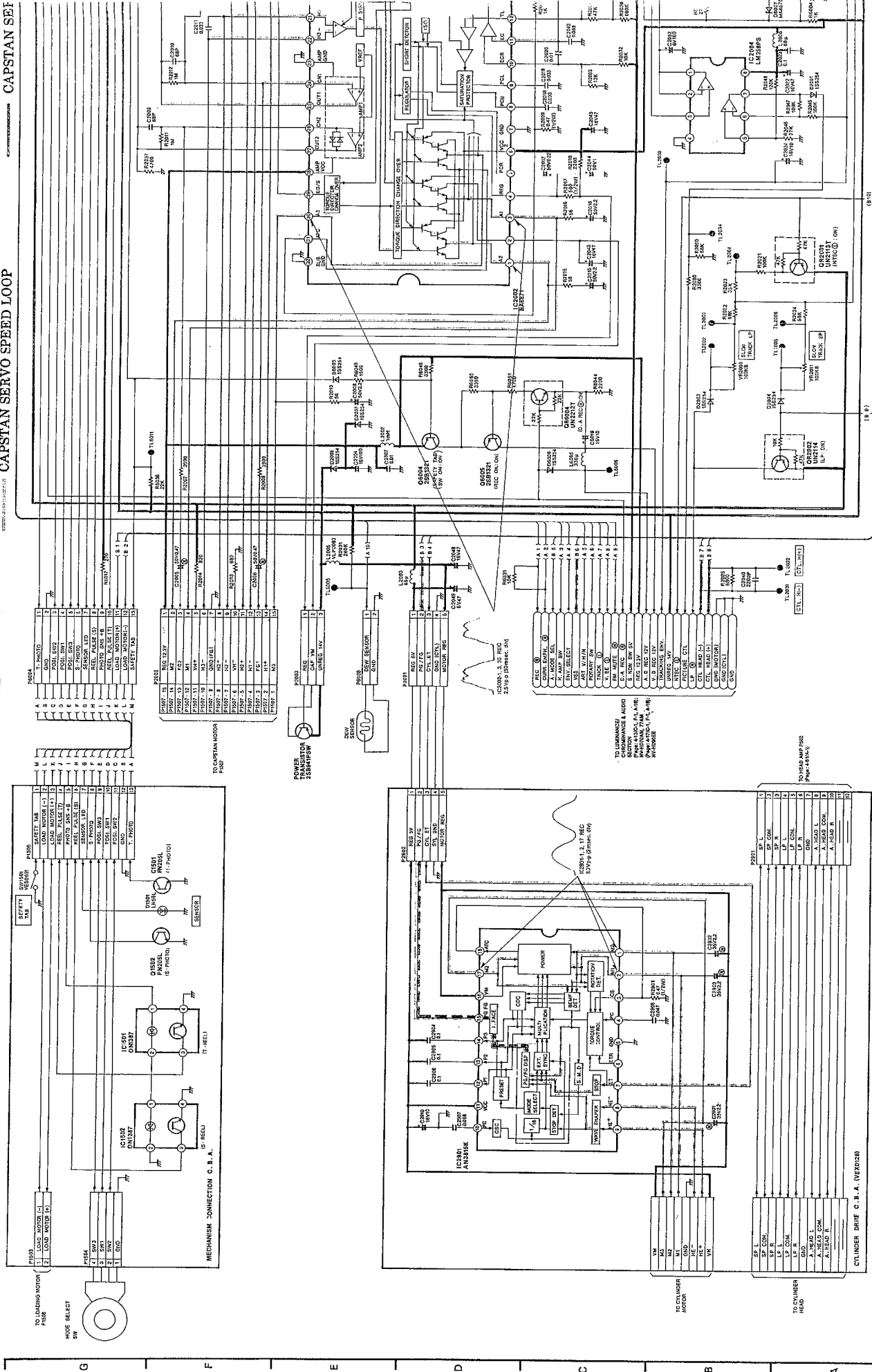
ADDRESS INFORMATION



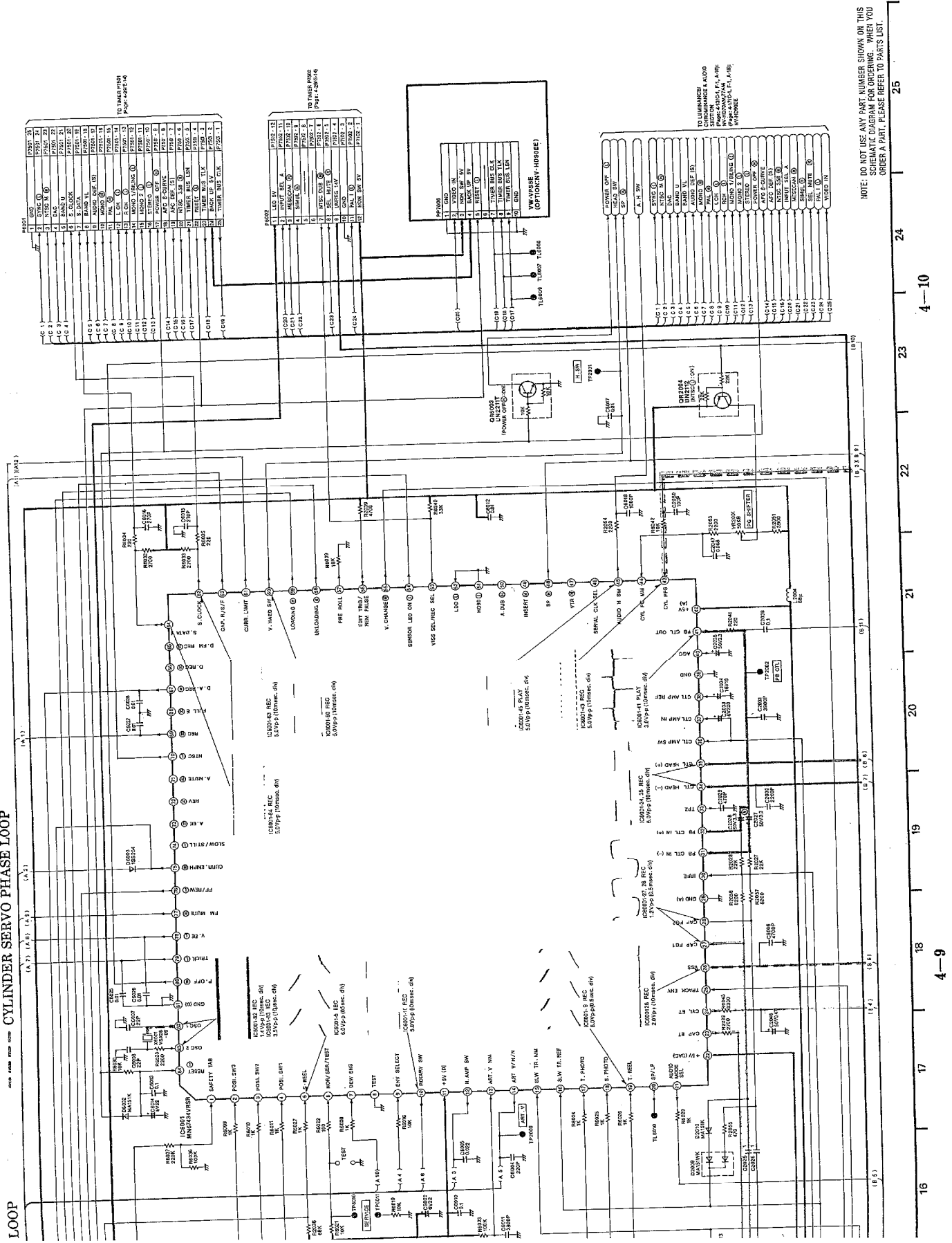
POWER SYSTEM CONTROL & SERVICE SECTION

CAPSTAN SERVO SPEED LOOP

CAPSTAN SEE



LOOP



SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

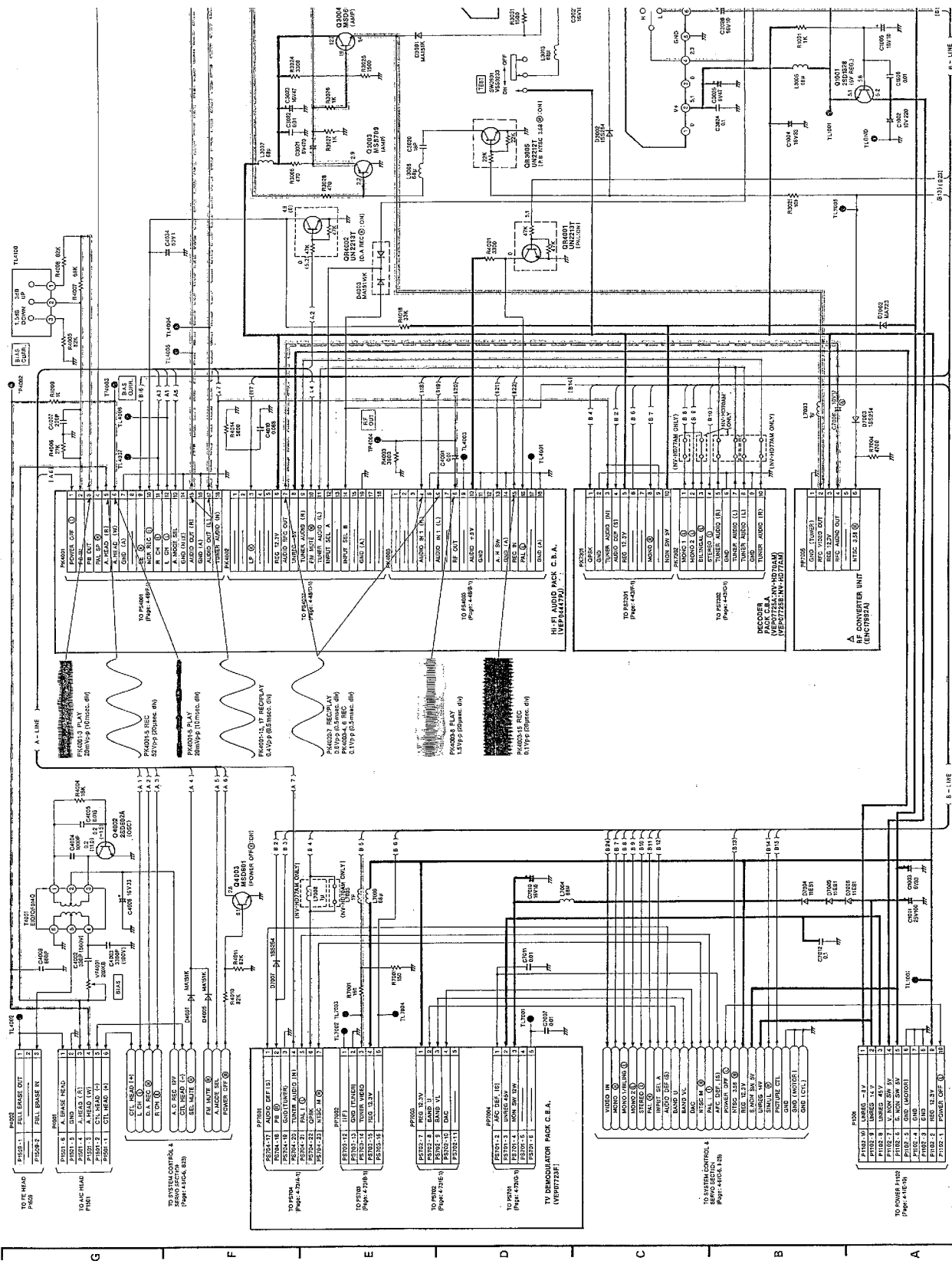
REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	1.8	15.2	15.2	0	0	0	7.4	9.9	4.7	0										
PLAY	1.6	14.8	14.8	0	0	0	7.4	9.8	0.3	0										
REC	4.2	14.8	14.8	0	0	0	7.4	9.8	2.4	0										
F.F	5.7	14.7	14.9	0	0	0	14.9	9.8	4.2	0										
REW	6.2	14.8	14.8	0	0	0	14.9	9.9	4.4	0										
REF. NO.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.5	4.6	0.5	14.4	0.4	15.0	0	4.7	0.8	3.0	0.2	0.4	0.1	5.2	1.4	0	2.3	2.3	2.3	2.3
PLAY	2.9	4.6	2.8	13.8	2.1	14.9	0	1.3	0.8	3.0	2.7	0.5	0.1	5.2	1.4	0	2.3	2.4	2.4	2.4
REC	2.9	4.6	2.8	13.7	2.1	14.9	0	0.6	0.6	3.0	2.7	0.4	0.1	5.2	1.4	0	2.3	2.4	2.4	2.4
F.F	7.3	14.7	7.5	6.4	12.9	14.8	0	0.9	0.7	3.0	2.4	0.5	0.2	5.2	1.4	0	2.4	2.4	2.4	2.4
REW	7.3	14.8	7.3	12.5	12.9	14.9	0	0.6	0.7	3.0	2.7	0.4	0.1	5.2	1.4	0	2.3	2.3	2.3	2.3
REF. NO.	IC2002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	2.3	2.3	0	5.8	6.0	6.1	6.0	11.8	2.1	0.5	0	0								
PLAY	2.4	2.4	0	3.6	6.0	6.1	6.1	11.8	0.1	2.9	0.1	0								
REC	2.4	2.3	0	6.1	6.0	6.1	6.1	11.8	0	2.9	0.1	0								
F.F	2.4	2.4	0	6.1	6.0	6.1	6.1	11.8	0	6.6	0.1	0								
REW	2.3	2.3	0	6.1	6.0	6.1	6.1	11.8	5.2	7.8	0.1	0								
REF. NO.	IC2004																			
MODE	1	2	3	4	5	6	7	8												
STOP	2.6	2.6	2.6	0	2.7	2.8	3.8	12.2												
PLAY	2.6	2.6	2.6	0	2.7	2.8	2.2	12.2												
REC	2.6	2.6	2.6	0	2.8	2.8	4.7	12.1												
F.F	2.6	2.6	2.6	0	2.8	2.8	3.5	12.2												
REW	2.6	2.6	2.6	0	2.8	2.8	2.6	12.2												
REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.3	14.3	0.1	1.1	0	2.5	2.5	2.6	2.5	2.7	5.1	3.8	3.8	3.8	1.3	15.0	14.3	0.1		
PLAY	14.5	15.1	0.1	1.1	0	2.6	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.9	1.4	14.9	14.6	0.1		
REC	14.9	14.9	0.1	1.0	0	2.6	2.5	2.6	2.5	2.7	5.1	4.8	3.8	3.8	1.1	14.8	14.5	6.0		
F.F	14.8	15.1	0.1	1.1	0	0	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.9	1.1	14.8	15.0	0.1		
REW	14.6	14.5	0.1	1.1	0	2.6	2.5	2.6	2.5	2.7	5.1	3.8	3.7	3.8	1.1	14.8	14.9	0.1		
REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.4	4.8	0	0	0.1	5.1	0	0	3.7	4.9	5.2	0	0	0	0	2.6	4.9	5.0	4.8	0
PLAY	0.5	5.0	0	0	4.5	5.1	0	0	3.8	5.2	5.2	0	0	0	0	2.6	4.8	4.9	4.4	0
REC	0	5.1	0	0	0.1	5.1	0	0	4.3	5.1	5.2	0	0	0	0	2.6	5.1	5.1	5.1	0
F.F	0.4	4.9	4.6	0	1.7	4.8	0	0	3.6	5.2	5.2	0	0	0	0	2.6	4.8	4.8	1.8	0
REW	0.6	4.4	4.6	0	1.8	4.9	0	0	2.9	3.8	5.2	0	0	0	0	2.6	4.7	4.7	2.4	0
REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.2	5.2	0.2	2.5	1.9	2.9	2.8	2.6	0	2.6	2.4	2.7	5.0	0	0	0	2.6	2.6	0	2.6
PLAY	5.2	5.2	2.7	2.5	3.3	2.6	2.6	2.6	0	2.6	2.5	2.7	2.8	0	0	0	2.6	2.6	0	2.9
REC	5.2	5.2	2.7	2.5	0.8	2.5	2.5	2.5	0	2.6	2.4	2.7	5.1	3.7	3.8	0	2.6	2.5	0	2.5
F.F	5.2	5.2	2.7	2.5	2.6	2.8	2.7	2.7	0	2.6	2.5	2.7	4.8	0	0	0	2.6	2.6	0	3.1
REW	5.2	5.2	2.7	2.5	1.4	2.6	2.6	2.6	0	2.6	2.5	2.7	4.8	0	0	0	2.5	2.5	0	3.1
REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.5	5.1	1.6	3.3	0	4.4	0	5.1	0	0	0	0	4.8	5.2	5.1	5.1	0.3	0	0	4.1
PLAY	2.6	5.1	1.3	3.6	3.8	3.8	0	5.1	0	0	0	0	4.7	0.1	5.1	5.1	0.5	0	0	5.2
REC	2.6	5.1	1.2	3.7	0	4.6	0	5.1	0	0	0	0	5.1	0	5.1	5.2	0	0	0	5.2
F.F	2.6	5.1	1.3	3.2	0	4.5	0	5.1	0	0	0	0	4.4	0.1	0	5.0	0.7	0	0	5.2
REW	2.6	5.1	2.0	3.1	0	4.7	0	5.1	0	0	0	0	4.2	0.1	0	5.0	0.7	0	0	4.4
REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	5.1	2.1	4.6	4.4	0	0	0	0	0.1	5.1	0	5.2	5.2	0	0	5.1	0	0	5.1	0.1
PLAY	5.1	0	4.5	4.5	0	0	0	0	0.1	5.1	0	0	0	0	0	5.0	0	4.8	5.1	0.1
REC	5.1	0	4.6	4.7	5.2	5.2	5.1	5.2	5.2	5.1	0	0	5.2	0	0	5.1	0	0	5.1	0.1
F.F	5.1	1.7	4.7	4.7	0	0	0	0	0.1	5.2	0	0	5.2	0	0	0	0	0	5.2	0.1
REW	5.1	5.2	4.6	4.5	0	0	0	0	0.1	5.2	0	5.2	5.2	0	0	0	0	1.0	5.2	0.1
REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP	0	2.5	2.6	4.8																
PLAY	0	2.3	2.6	4.8																
REC	0	2.4	2.6	4.9																
F.F	0	2.4	2.6	4.8																
REW	0	2.4	2.6	4.8																

VOLTAGE CHART

SYSTEM CONTROL & SERVO TRANSISTORS DC VOLTAGE CHART (SP MODE)

REF. NO.	Q1503			Q6001			Q6002			Q6004			Q6005					
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B			
STOP	15.1	4.6	14.5	5.2	15.0	5.7	5.2	0.2	5.2	12.2	12.2	11.5	12.2	0.2	12.2			
PLAY	14.9	4.6	14.2	5.1	14.9	5.7	5.1	5.1	4.4	12.2	12.2	11.4	12.2	0.2	12.2			
REC	14.8	4.6	14.2	5.1	14.8	5.7	5.1	5.1	4.3	12.1	12.0	11.4	12.0	11.8	11.3			
F.F	14.9	14.8	14.1	5.1	14.8	5.7	5.1	5.1	4.3	12.2	12.2	11.4	12.2	0.2	12.1			
REW	14.8	13.4	14.1	5.1	14.8	5.7	5.1	5.0	4.3	12.2	12.2	11.4	12.2	0.2	12.2			
REF. NO.	QR2002			QR2003						QR6001					QR6003			
MODE	E	C	B	1	2	3	4	5		1	2	3	4	5		E	C	B
STOP	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
PLAY	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
REC	5.2	0.3	5.1	0	0	5.1	0	5.1		0	0	5.1	0	5.1		0	12.8	0.1
F.F	5.2	0.3	5.1	0	0.7	0	0	0		14.8	10.6	0	0	0		0	12.8	0.1
REW	5.2	0.3	5.1	0	1.7	0	0	0		14.8	10.4	0	0	0		0	12.8	0.1
REF. NO.	QR6004																	
MODE	E	C	B															
STOP	0	11.7	0															
PLAY	0	12.1	0															
REC	3.6	3.8	5.1															
F.F	0.8	12.1	0															
REW	0	12.1	0															

4-4. LUMINANCE/CHROMINANCE & AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM (NV-HD70AM, HD77AM)

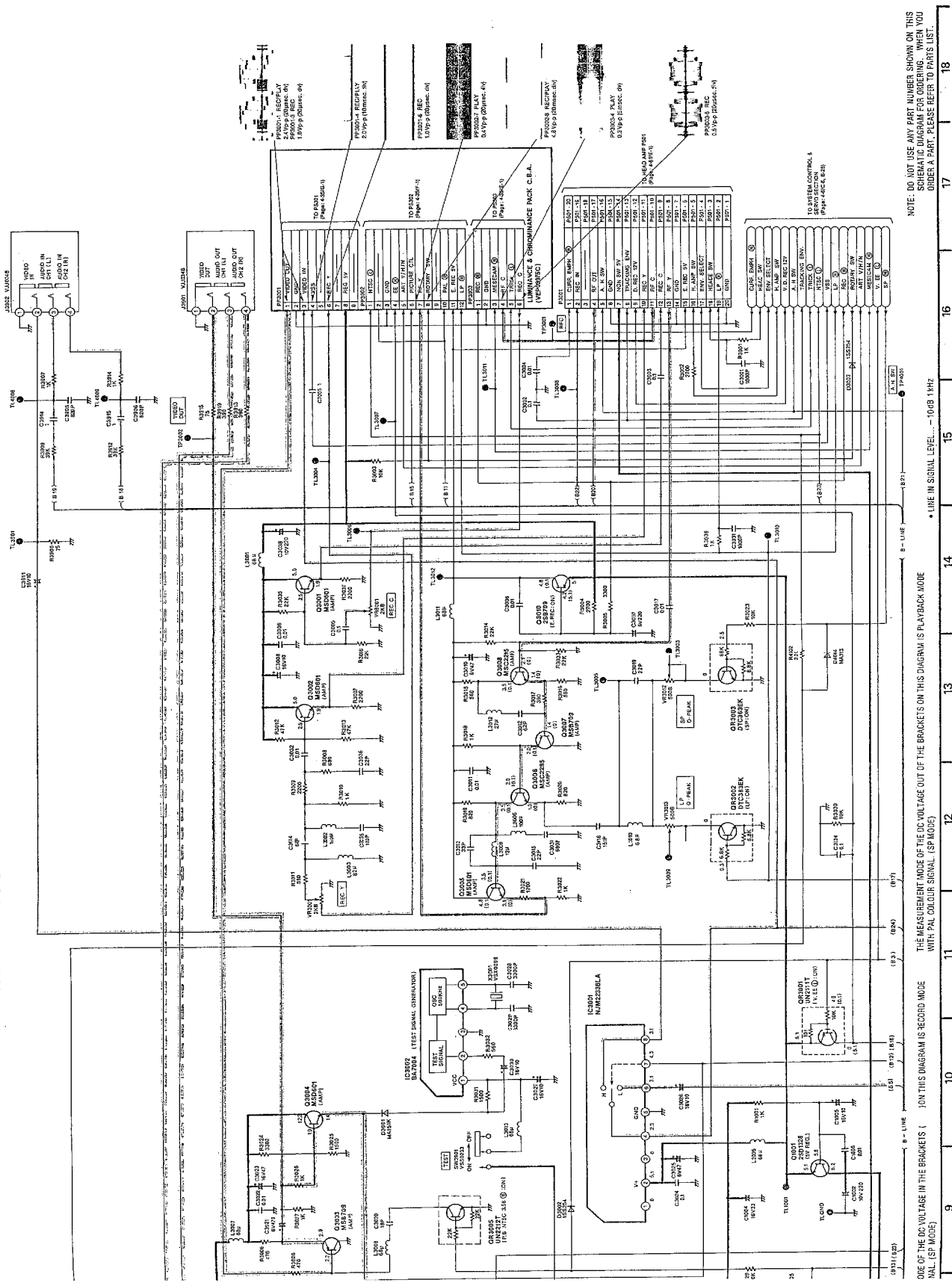


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MORE OF THE DC VOLTAGE IN THE BRACKETS () ON TH WITH PAL COLOUR SIGNAL. (SP MODE)

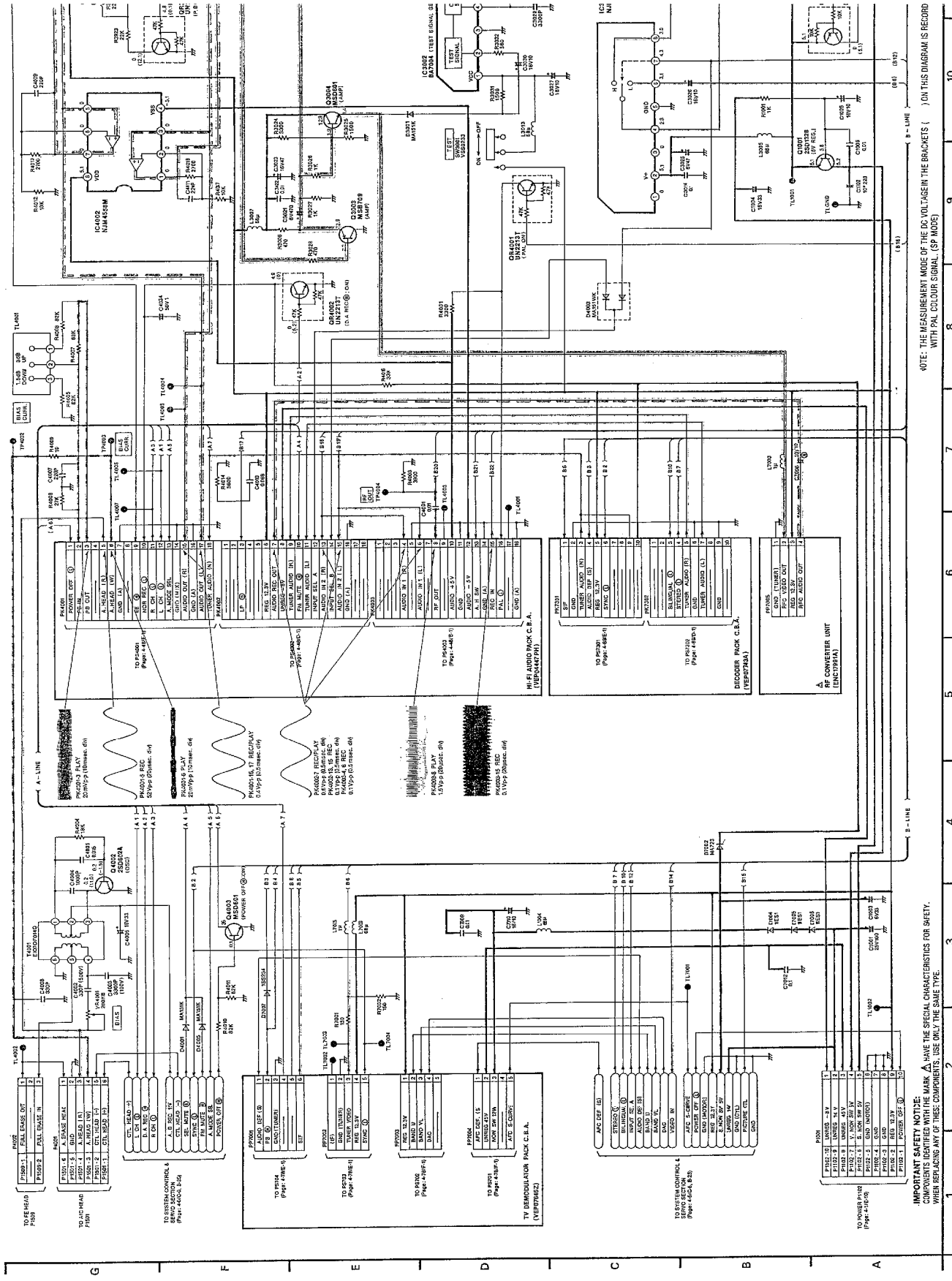
VIDEO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN REC MODE



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-5. LUMINANCE/CHROMINANCE & AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM (NV-HD90EE)



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS { } ON THIS DIAGRAM IS RECORD WITH PAL COLOUR SIGNAL (SP MODE)

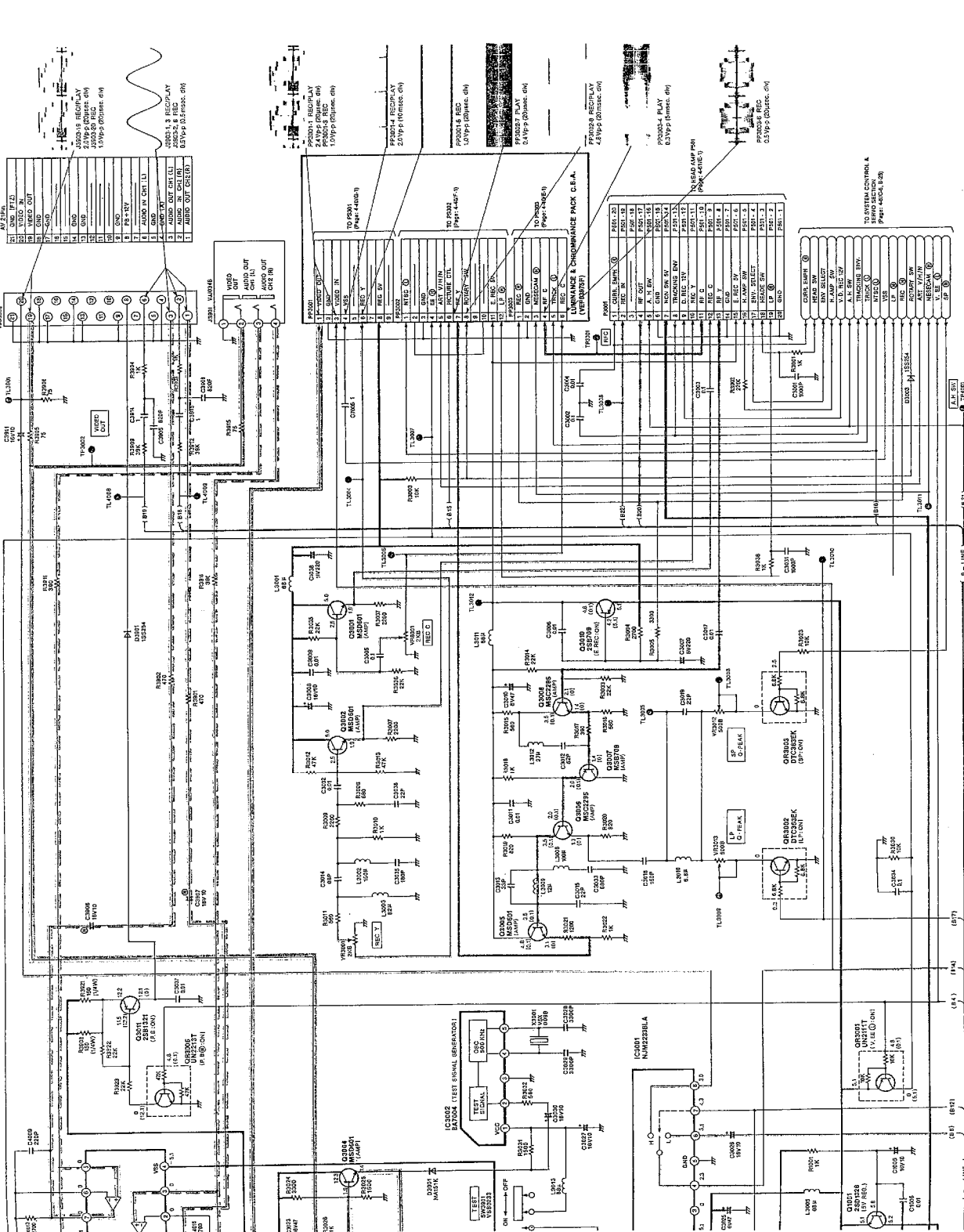
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ▲ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

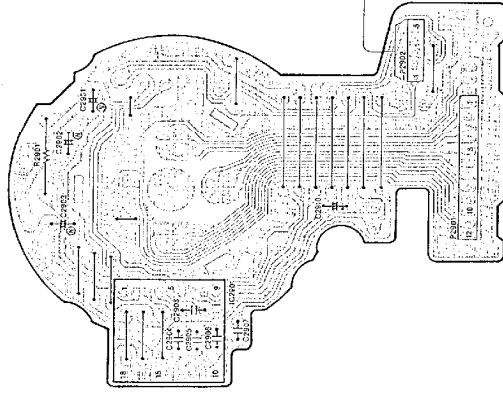
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



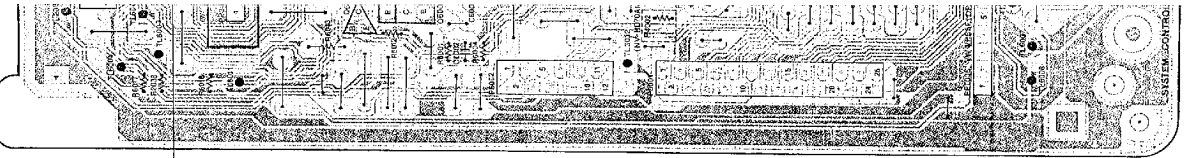
HE BRACKETS () ON THIS DIAGRAM IS RECORD MODE
THIS MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE
WITH A1 COLOUR SIGNAL (SP MODE)
LINE IN SIGNAL LEVEL... -12dB 1kHz
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PART'S LIST.

4-6 MAIN C.B.A (VEP03A88J: NV-HD70AM) (VEP03A88L: NV-HD77AM) (VEP03A88H: NV-HD90EE)

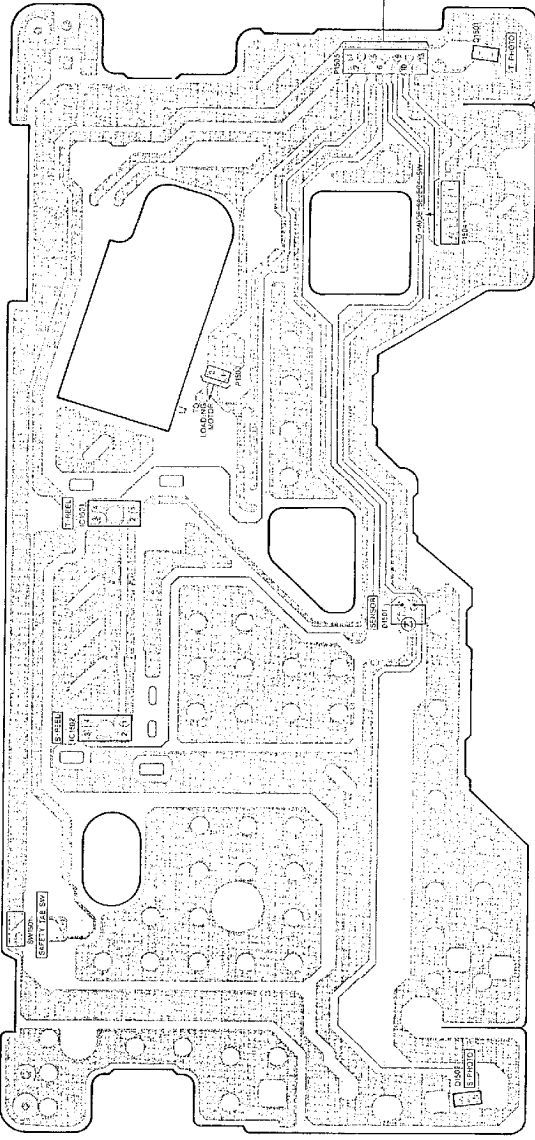
CYLINDER DRIVE C.B.A. (VEX0128)



MAIN C.B.A. (VEP03A88J)



MECHANISM CONNECTION C.B.A.



MAIN C.B A ADDRESS INFORMATION

SYSTEM CONTROL & SERVO SECTION	
Transistor	
Q1501	A-7
Q1502	A-1
Q6001	E-8
Q6002	E-8
Q6004	E-12
Q6005	E-13
Transistor & Resistor	
QR2001	B-10
QR2002	C-9
QR2003	D-9
QR2004	B-12
QR6001	C-9
QR6003	C-15
QR6004	E-13
Integrated Circuit	
IC1501	C-4
IC1502	C-3
IC2001	G-10
IC2002	D-13
IC2004	E-10
IC2901	F-5
IC6001	C-10
Test Point	
TP2001	C-10
TP2002	D-9
TP2009	D-11
TP2015	D-10
TP2026	D-13
TP6010	C-11
TP6011	C-11
Adjustment	
VR2001	B-12
VR2006	B-9
VR2011	C-9
Connector	
P1503	B-5
P1504	A-6
P1505	B-7
P2001	B-11
P2002	E-13
P2003	E-14
P2901	E-5
P2902	E-6
P6001	C-8
P6002	D-8
P6003	G-12
P6004	G-9
PP7006	B-8

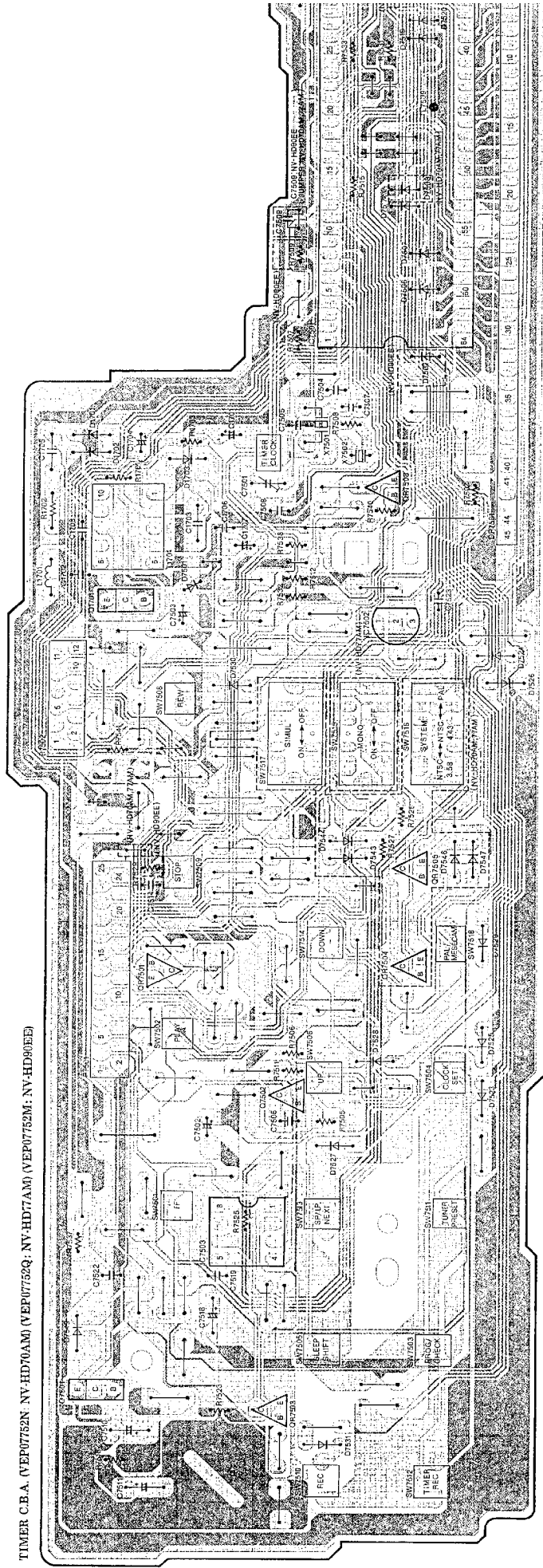
ADDRESS INFORMATION

LUMINANCE/ CHROMINANCE & AUDIO SECTION	
Transistor	
Q1001	C-15
Q3001	E-11
Q3002	E-11
Q3003	A-15
Q3004	B-15
Q3005	F-10
Q3006	F-11
Q3007	G-10
Q3008	G-11
Q3010	G-12
Q3011	D-16
Q4002	F-14
Q4003	G-14
Transistor & Resistor	
QR3001	F-14
QR3002	G-12
QR3003	G-11
QR3005	A-14
QR3006	D-15
QR4001	D-15
QR4002	F-15
Integrated Circuit	
IC3001	E-16
IC3002	B-15
IC4002	F-15
Test Point	
TP3001	F-13
TP3002	E-16
TP4001	E-14
TP4002	G-13
TP4003	G-14
TP4004	E-15
Adjustment	
VR3001	E-10
VR3012	G-11
VR3013	F-11
VR4001	G-13
VR8001	E-12
Connector	
P1001	C-14
P3001	E-14
P4001	G-13
P4002	F-13
PK4001	G-15
PK4002	F-15
PK4003	E-15
PK7301	C-13
PK7302	C-14
PP3001	F-9
PP3002	F-10
PP3003	F-12
PP7001	B-10
PP7002	B-12
PP7003	B-13
PP7004	B-16
PP7005	C-16

ADDRESS INFORMATION

4-7 TIMER C.B.A. (VEP07752N: NV-HD70AM) (VEP07752Q: NV-HD77AM) (VEP07752M: NV-HD90EE) & OPERATION C.B.A. (VEP06931B)

TIMER C.B.A. (VEP07752N: NV-HD70AM) (VEP07752Q: NV-HD77AM) (VEP07752M: NV-HD90EE)

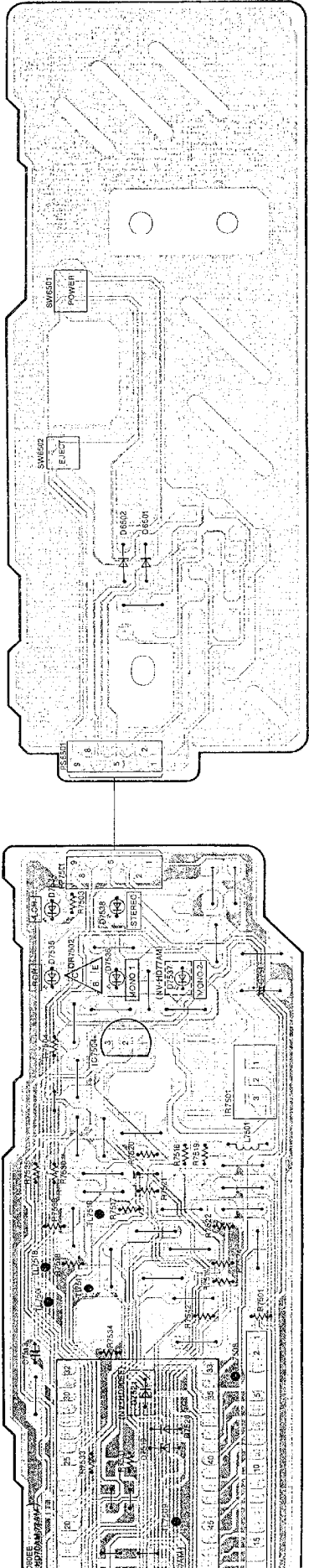


1 2 3 4 5 6 7 8 9

TIMER C.B.A. & OPERATION C.E.A.									
Transistor			A-4			Adjustment			
Q7501	C-6		Q7504	A-5		C7501	B-7		
Q7501	C-6		Q7505	B-7					
Q7502	B-3		Q7503			Connector			
Transistor & Resistor			Integrated Circuit						
Q7501	C-4		IC7501	B-8		P7501	C-4		
Q7502	B-12		IC7502	B-6		P7502	C-5		
Q7503	B-2		IC7503	B-2		P7501	B-12		
			IC7504	B-11		P8501	B-13		

ADDRESS INFORMATION

OPERATION C.B.A. (VEF06031B)



SEGMENT CONTROL SIGNAL



GRID CONTROL SIGNAL

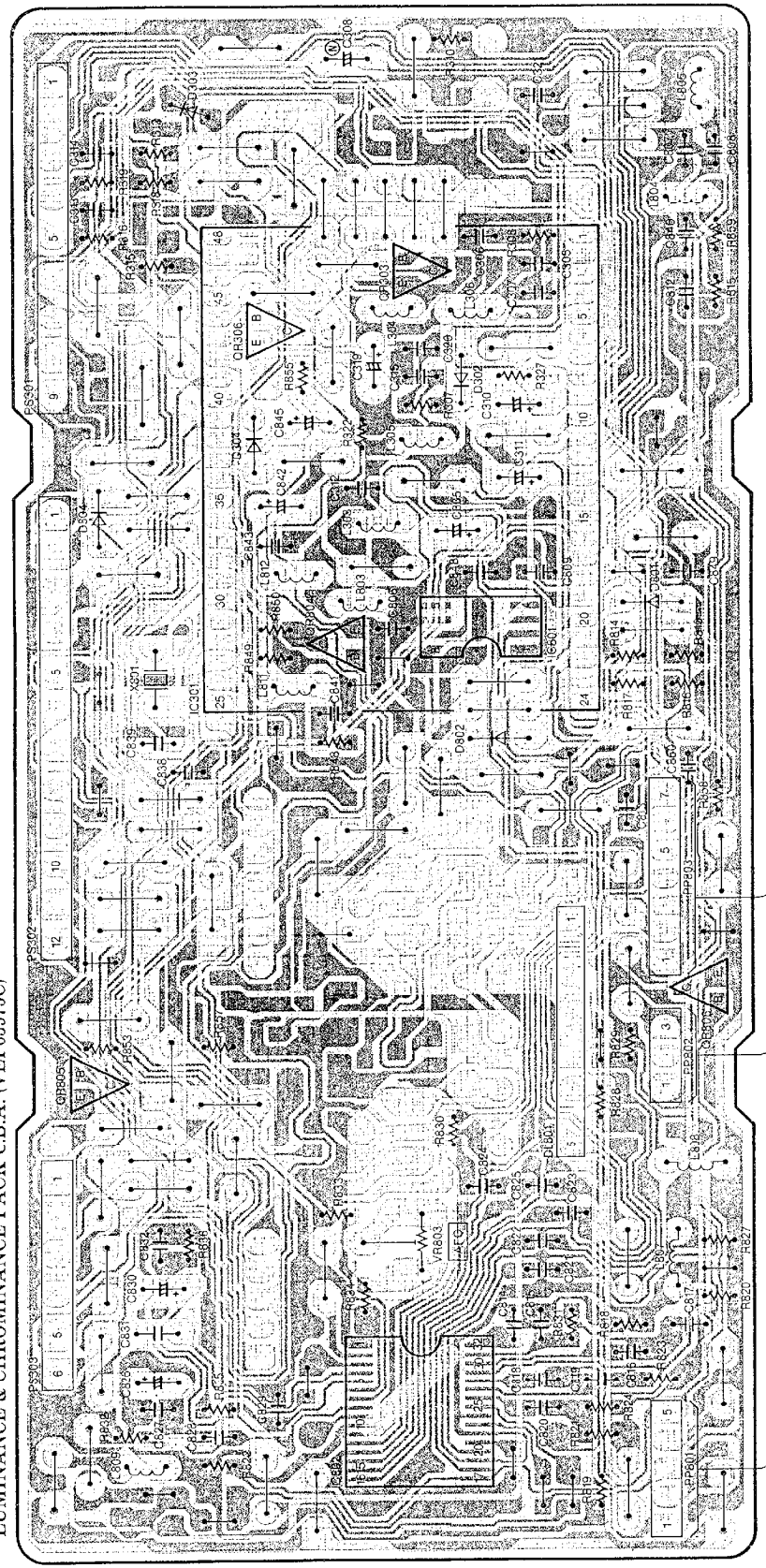
TUNE CONTROL SIGNAL



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

4-9 LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975C: NV-HD70AM, HD77AM)

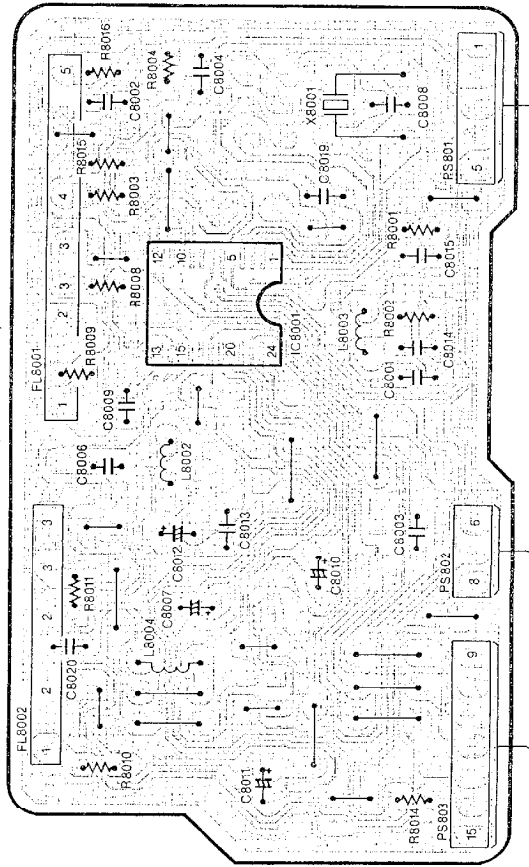
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975C)



LUMINANCE & CHROMINANCE PACK C.B.A.				
Transistor & Resistor			Adjustment	
CR303	B-5	Connector	VRE03	B-2
CR306	B-5			
CR804	B-4			
CR805	C-2			
CR806	A-3			
Integrated Circuit				
IC301	B-4		PR801	A-1
IC301	A-4		PR802	A-2
IC301	A-4		PR803	A-3
IC302	B-1		PS301	C-5
IC301	A-8		PS302	C-3
			PS303	C-1
			PS801	A-8
			PS802	A-7
			PS803	A-6

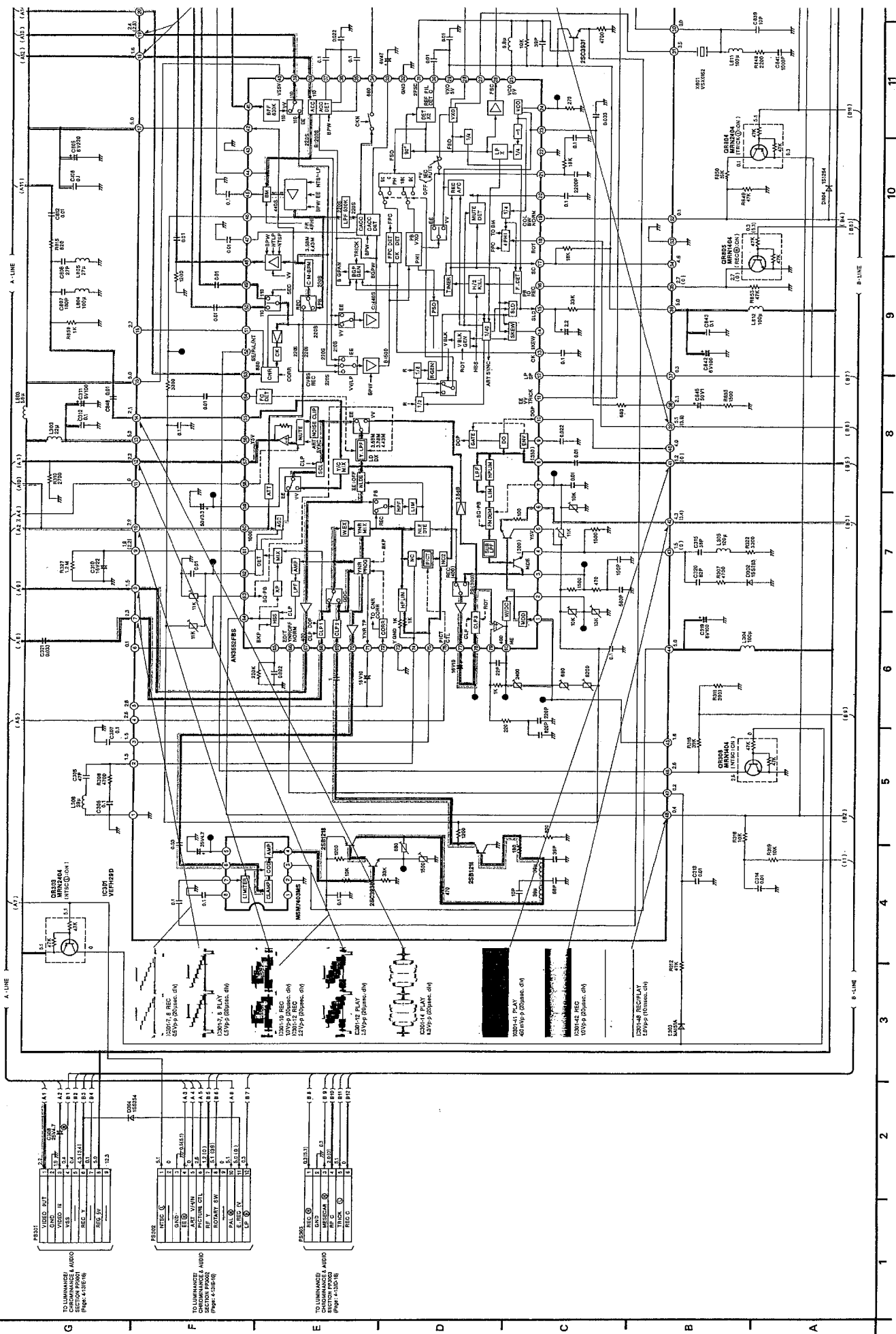
ADDRESS INFORMATION

NTSC RECORDING PACK C.B.A. (VEP03888C)

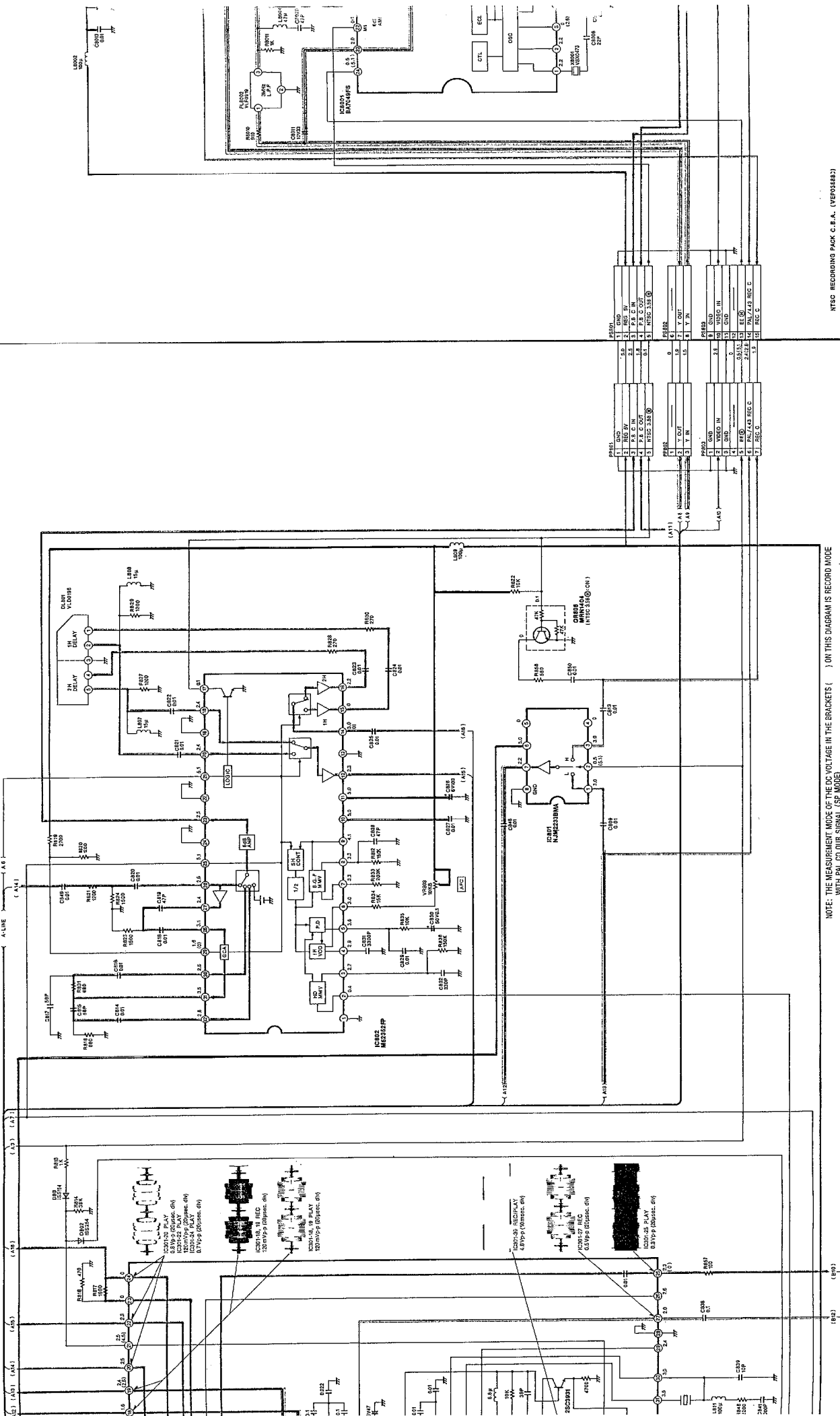


6 7 8 9

4-10. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM (NV-HD70AM, HD77AM)



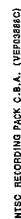
MAIN SIGNAL PATH IN REC MODE



NOTE: THE MEASUREMENT MADE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL (SP MODE). THE MEASUREMENT MADE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE).

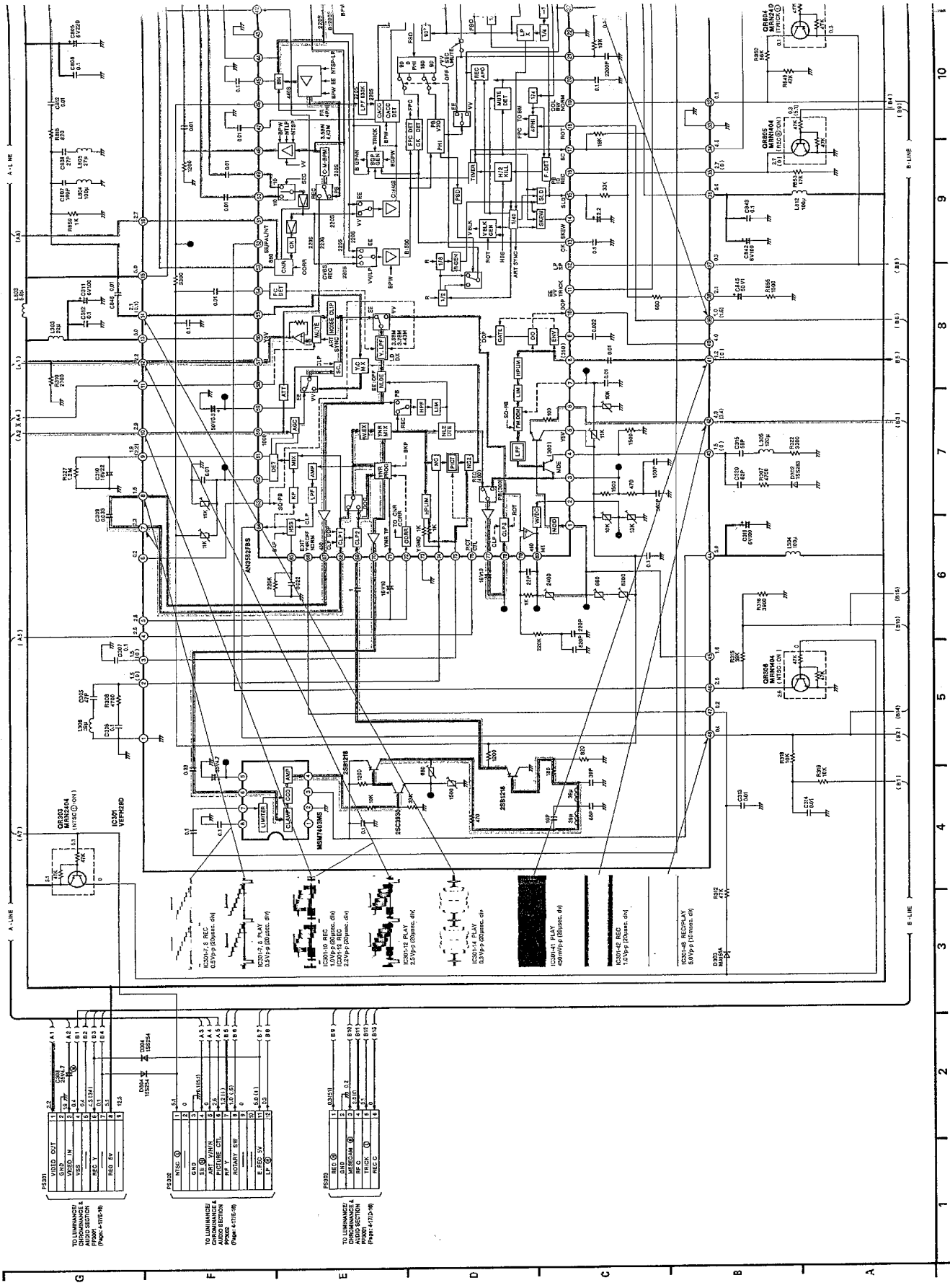
NTSC RECORDING PACK C.B.A. (VPE038882)

MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PART'S LIST.

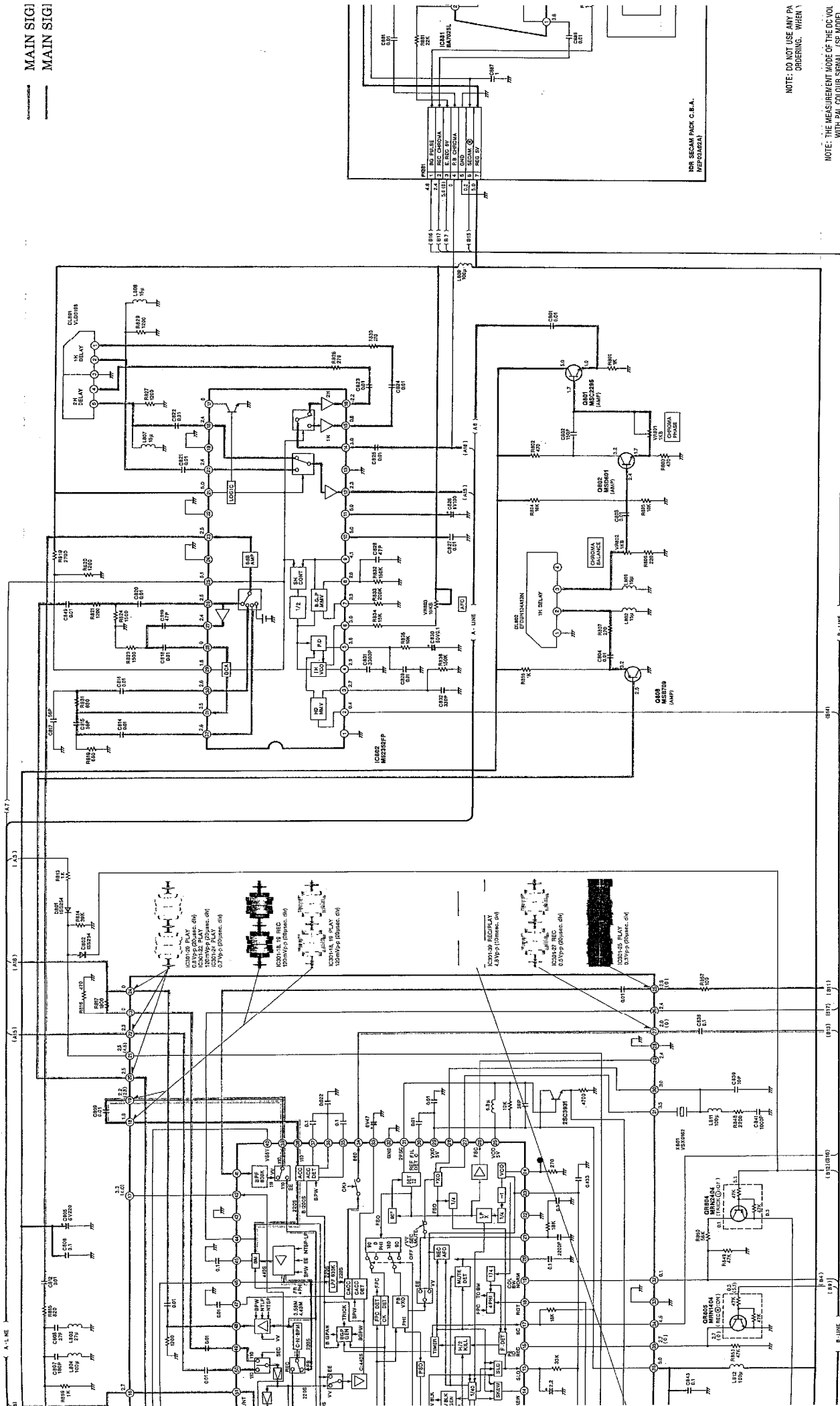
4-11. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM (NV-HD90EE)



**LUMINANCE & CHROMINANCE
PACK (EE)**

**LUMINANCE & CHROMINANCE
PACK (AM)**

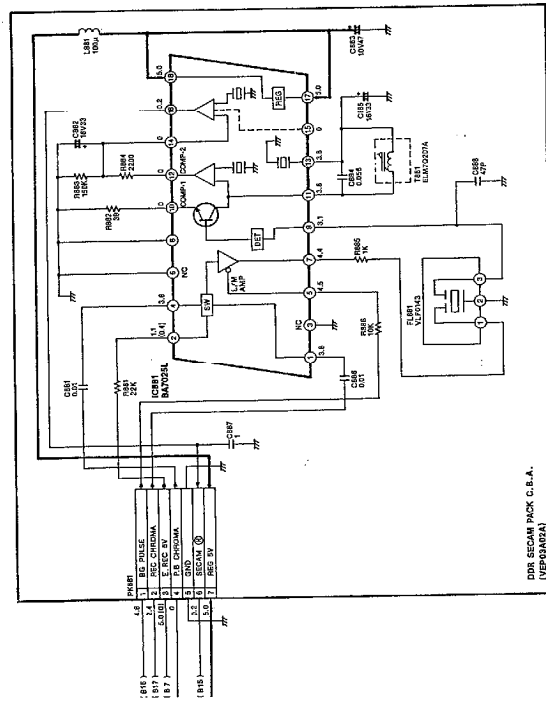
MAIN SIG
MAIN SIG



NOTE: DO NOT USE ANY PA ORDERING WHEN \

NOTE: THE MEASUREMENT MODE OF THE DC VOL WITH PAL COLOUR SIGNAL (SP MODE) THE MEASUREMENT MODE OF THE DC VOL WITH PAL COLOUR SIGNAL (SP MODE)

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE

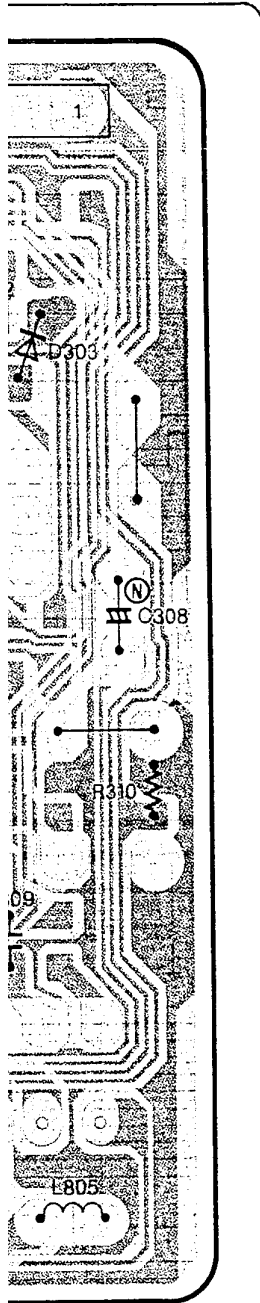


NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

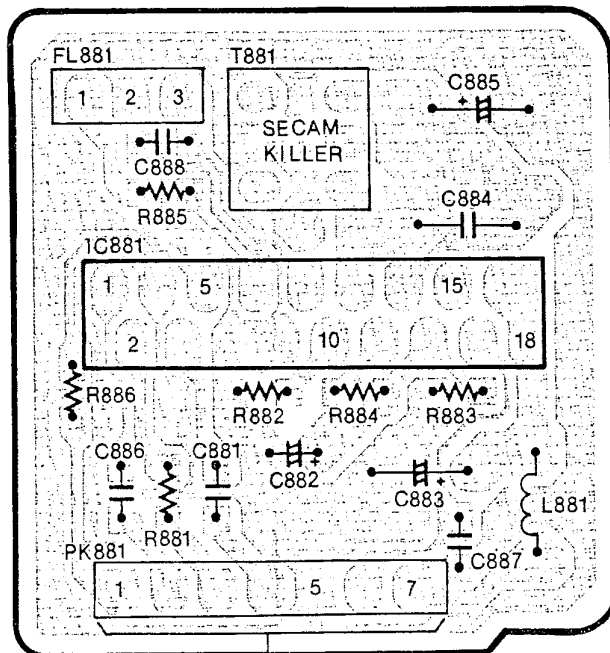
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS [] ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL (SP MODE). THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE).

LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03975F)





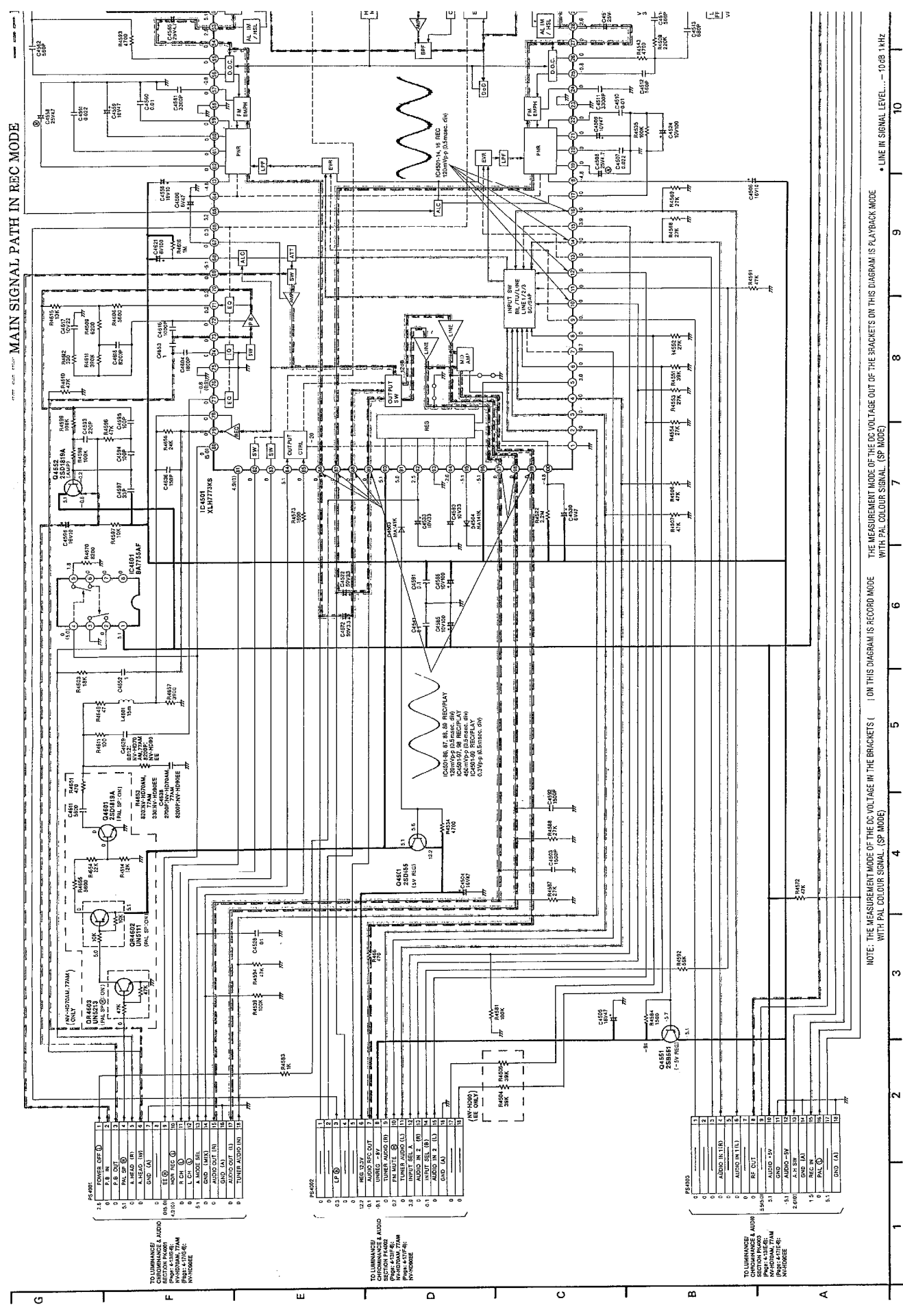
DDR SECAM PACK C B A (VEP03A02A)



LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q801	B-3
Q802	B-2
Q808	B-4
Transistor & Resistor	
QR303	B-5
QR306	B-5
QR804	B-4
QR805	C-2
Integrated Circuit	
IC301	B-4
IC802	B-1
IC881	B-6
Adjustment	
T881	B-7
VR801	B-3
VR802	B-2
VR803	B-2
Connector	
PK881	A-6
PS301	C-5
PS302	C-3
PS303	C-1

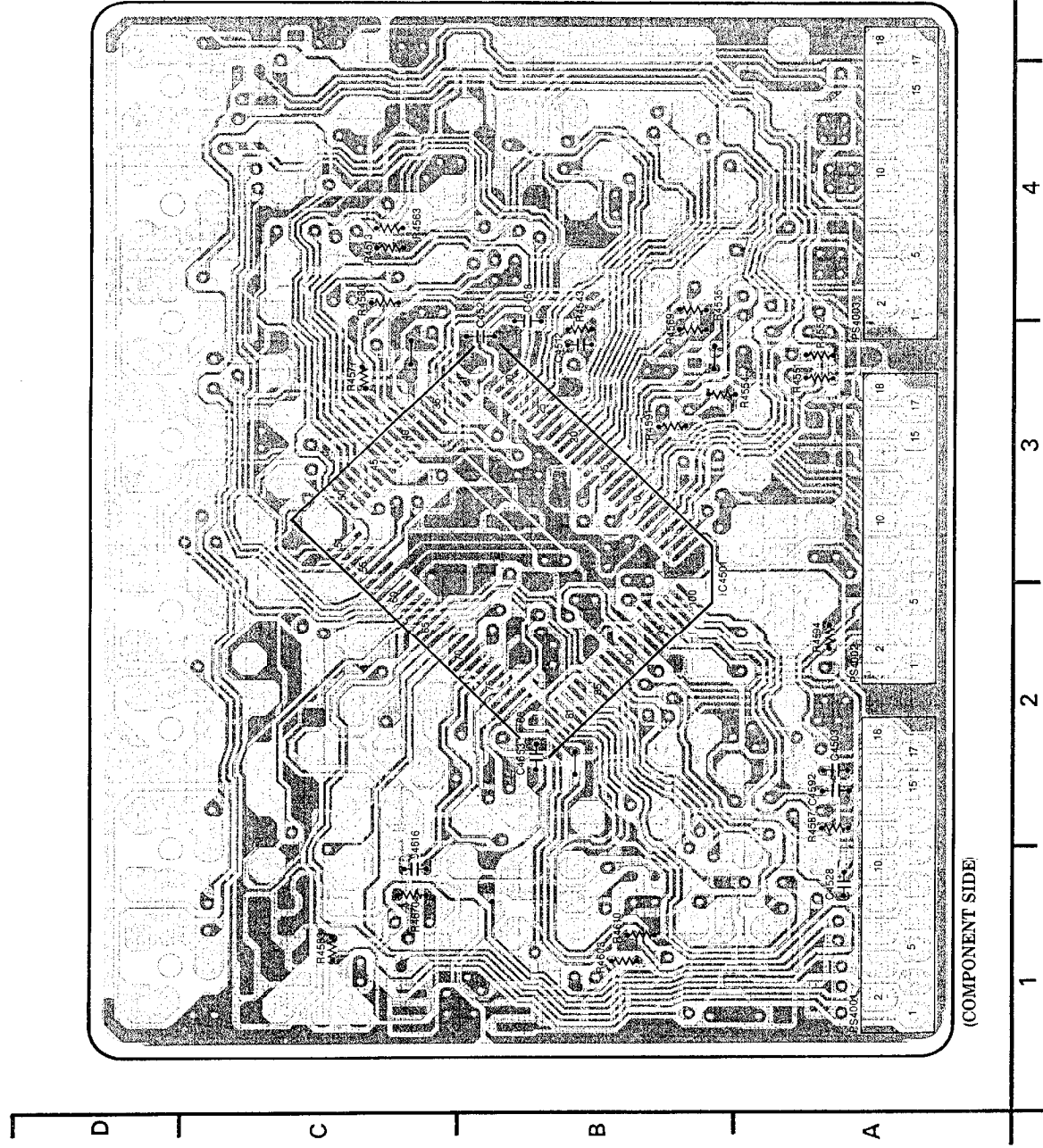
ADDRESS INFORMATION

4-13. HI-FI AUDIO PACK SCHEMATIC DIAGRAM

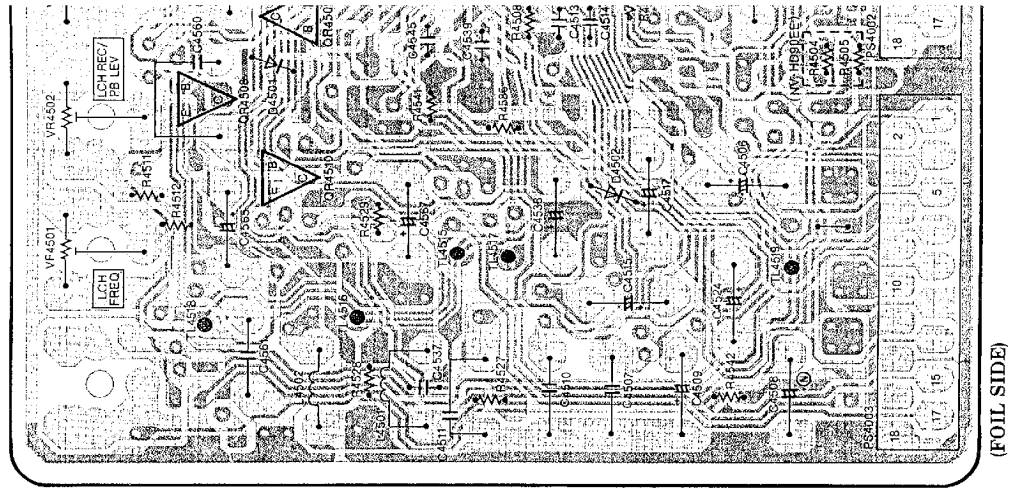


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS () ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

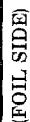
4-14 Hi-Fi AUDIO PACK C B A (VEP04447PJ: NV-HD70AM, HD77AM) (VEP04447PH: NV-HD90EE)



4-51

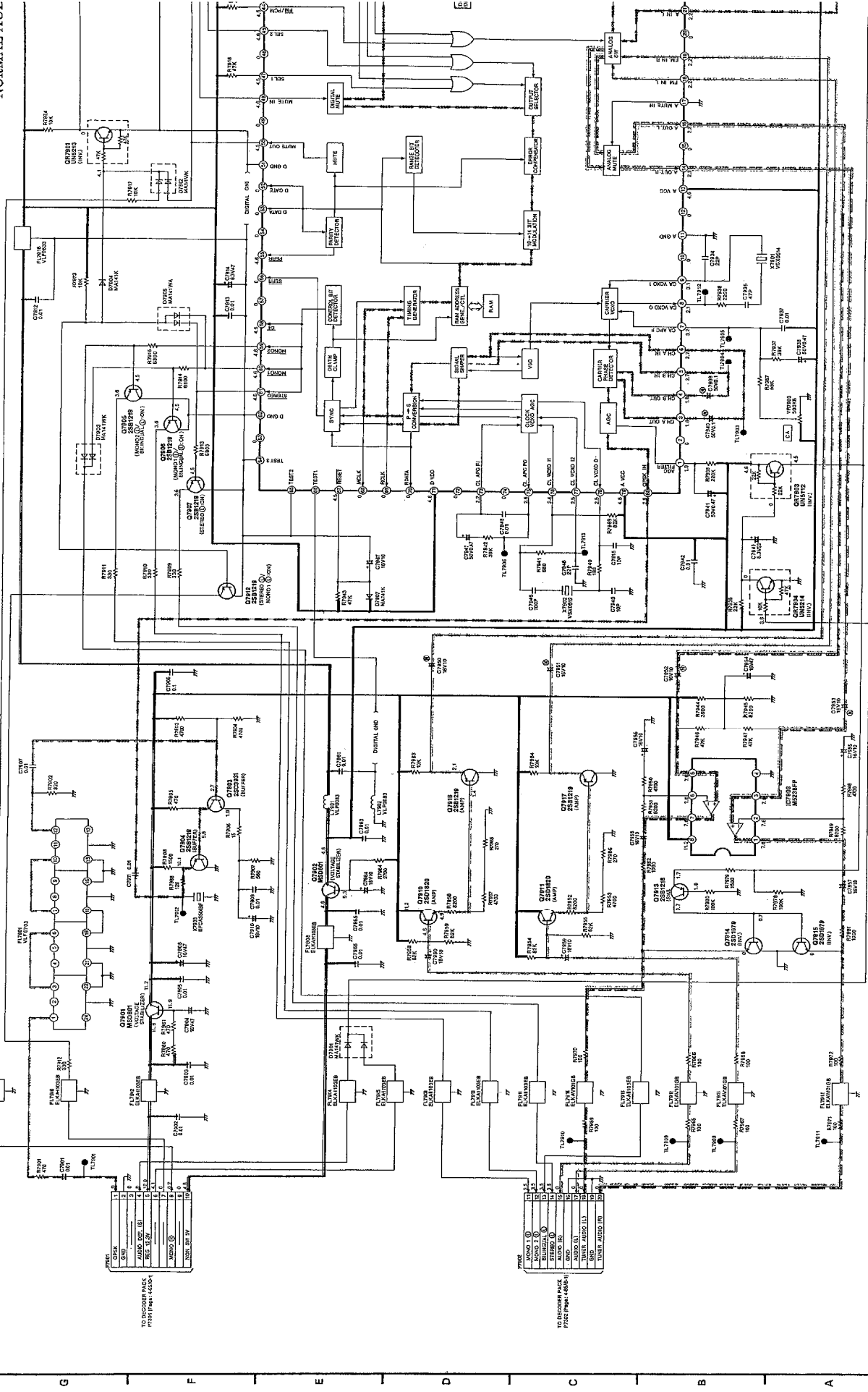


4-52

ADDRESS INFORMATION

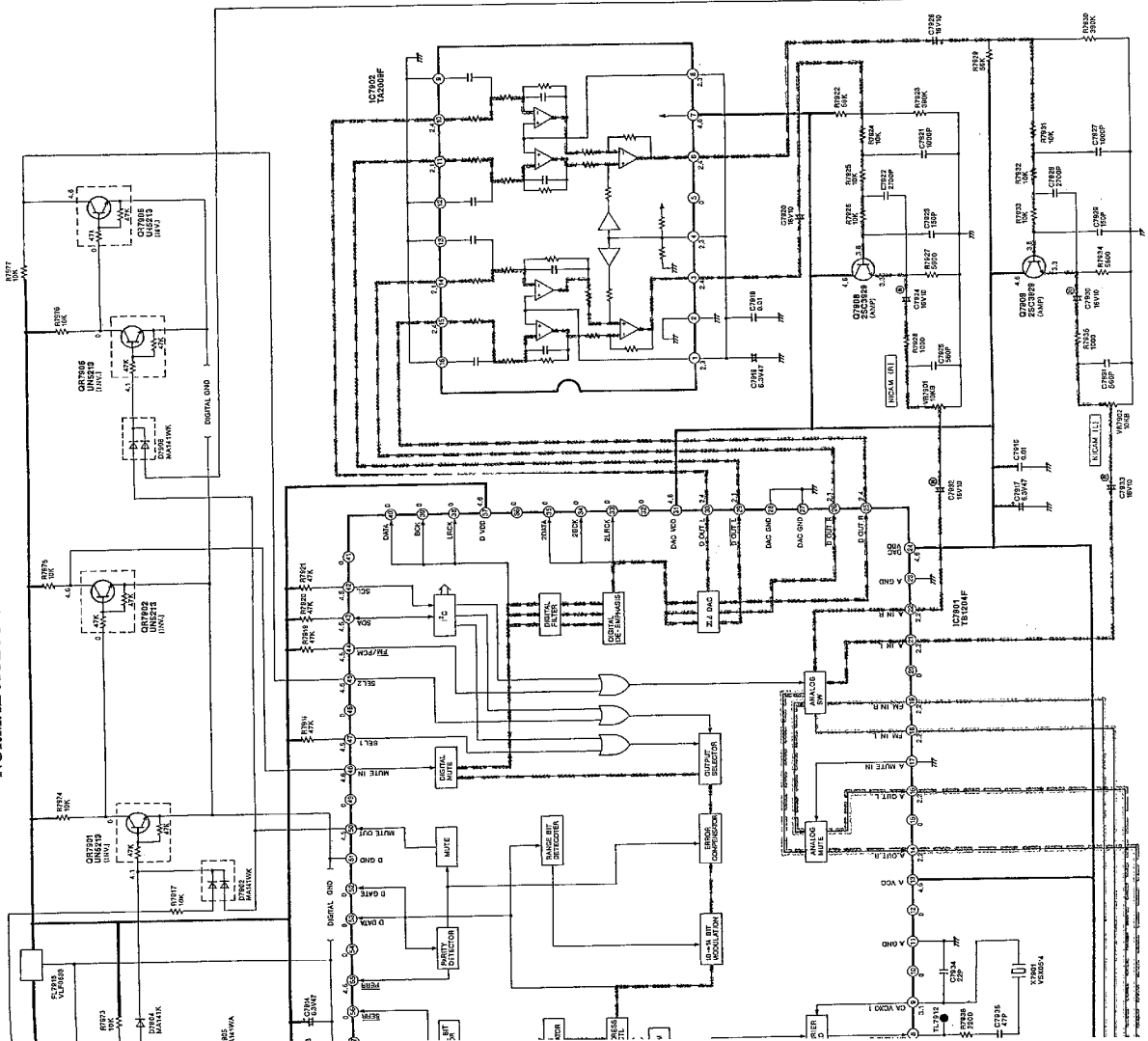
4-15. NICAM DECODER SCHEMATIC DIAGRAM (NV-HD77AM)

NOTE: THE MEASUREMENT MADE OF THE D



NORMAL AUDIO SIGNAL PATH

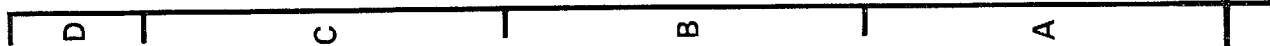
NICAM AUDIO SIGNAL PATH



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

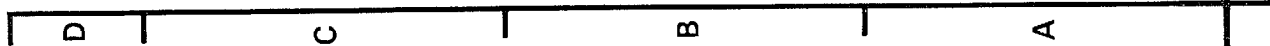
NOTE: THE MEASUREMENT MADE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

A horizontal bar divided into four equal segments labeled D, C, B, and A from left to right.

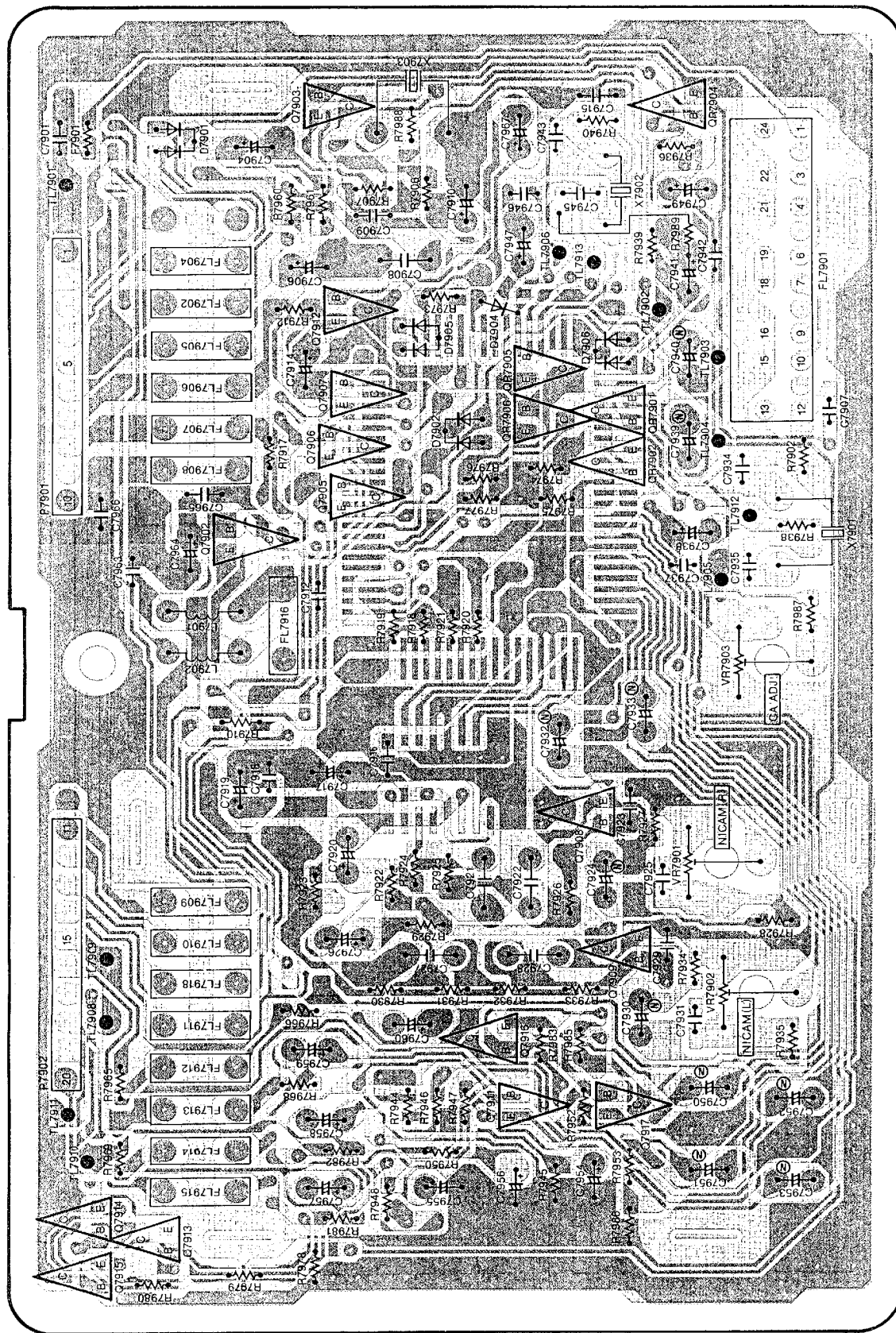


(FOIL SIL)

60



NICAM DECODER PACK C.B.A.	
Transistor	C-1
Q7901	C-9
Q7902	C-10
Q7903	C-1
Q7904	C-9
Q7905	C-3
Q7906	C-9
Q7907	B-3
Q7908	B-7
Q7909	B-4
Q7910	B-7
Q7911	B-7
Q7912	C-10
Q7913	C-6
Q7914	C-6
Q7915	C-6
Q7916	B-7
Transistor & Resistor	
Q7901	B-9
Q7902	B-9
Q7903	A-10
Q7904	B-9
Q7905	B-9
Q7906	B-9
Integrated Circuit	
IC7901	B-2
IC7902	B-3
IC7903	B-5
Adjustment	
VR7901	A-9
VR7902	A-7
VR7903	A-9
Connector	
PK7901	D-2
PK7902	D-8
PK7903	D-4
PK7904	D-7
ADDRESS INFORMATION	



(FOIL SIDE)

6

7

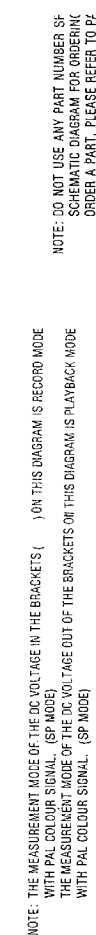
8

9

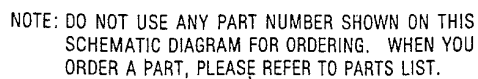
10

NICAM DECODER C.B.A. (HD77AN)		HEAD AMP		NICAM DECODER C.B.A. (HD77AN)
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— AUDIO MAIN SIGNAL PATH IN REC MODE
— AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

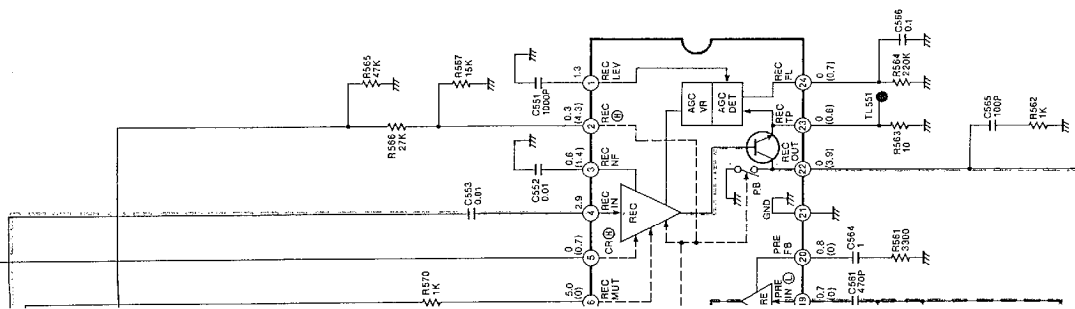


ATH IN REC MODE
ATH IN PLAYBACK MODE



4-18 HEAD AMP C B A (VEP05176C)

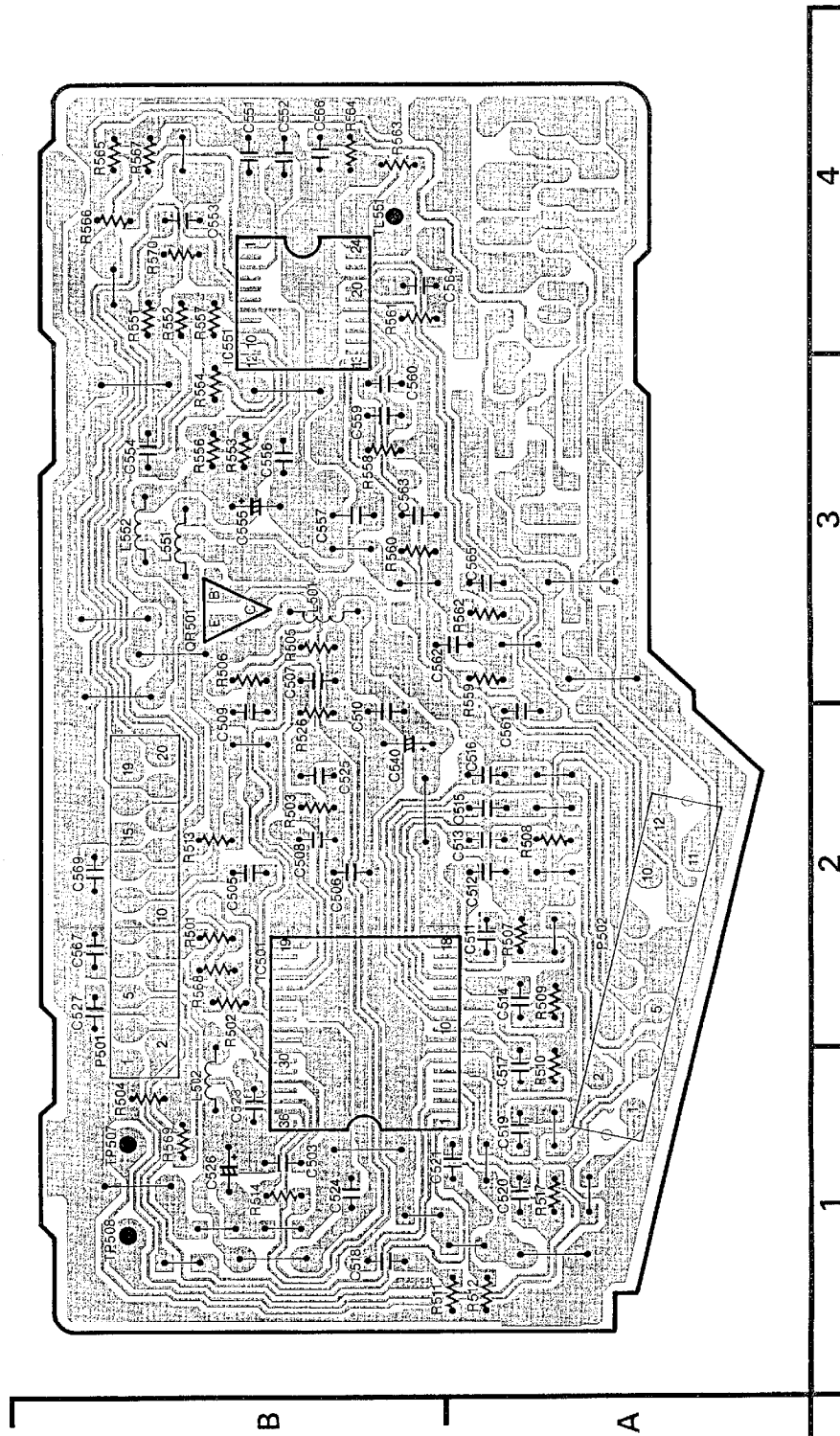
WITH IN REC MODE
WITH IN PLAYBACK MODE



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING WHEN YOU ORDER A PART. PLEASE REFER TO PARTS LIST.

HEAD AMP C.B.A.	
Transistor & Resistor	
OP001	B-3
Integrated Circuit	
IC501	B-1
IC551	B-4
Test Point	
TP507	B-1
TP508	B-1
Connector	
P501	B-2
P502	A-1

ADDRESS INFORMATION

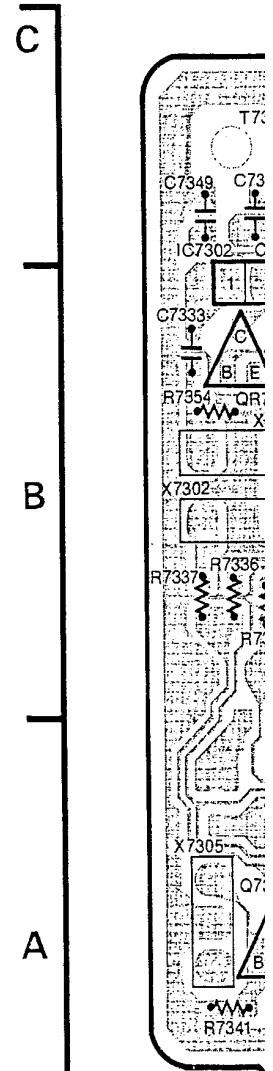
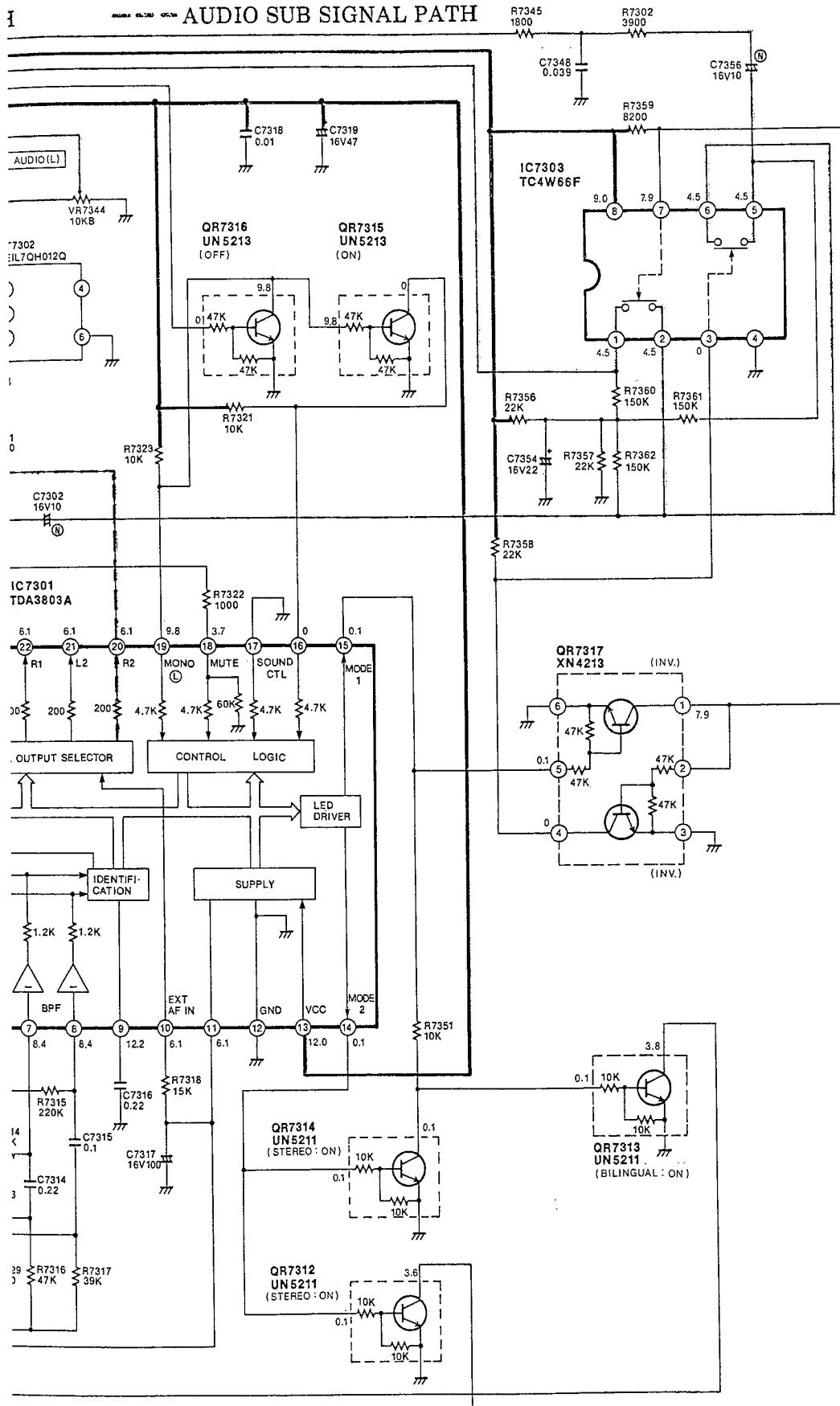


AUDIO MAIN SIGNAL PATH

AUDIC

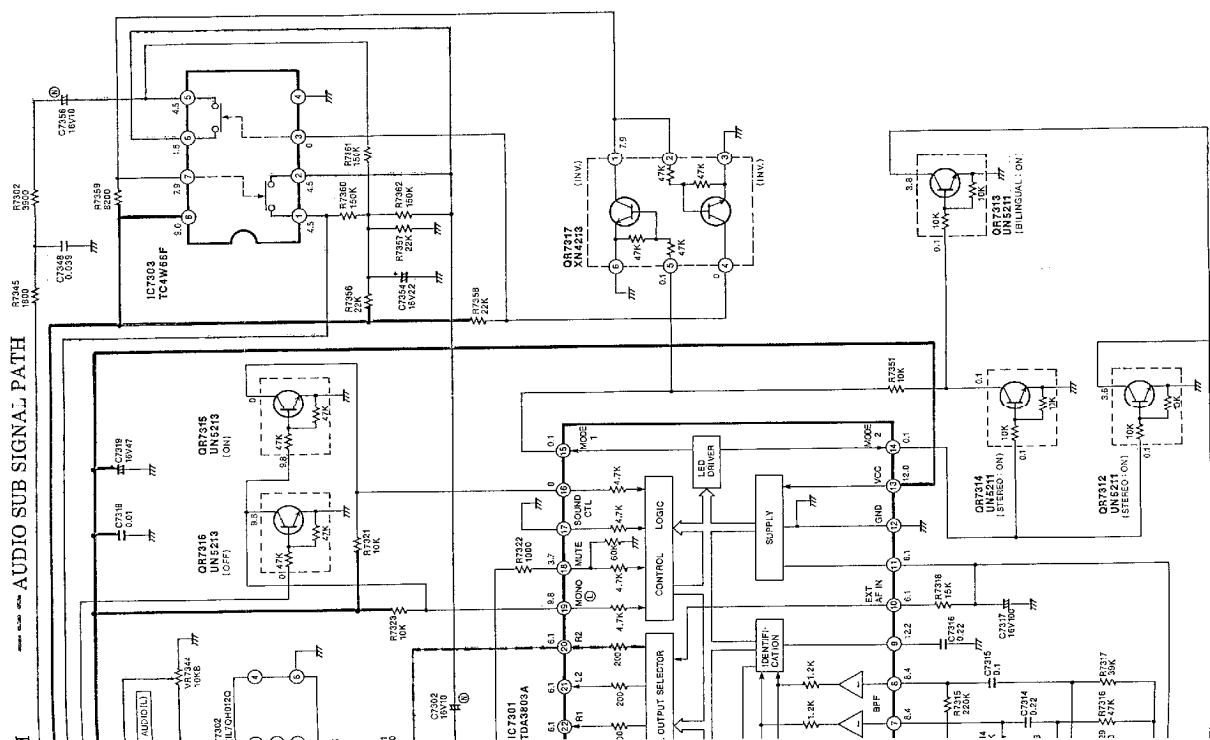
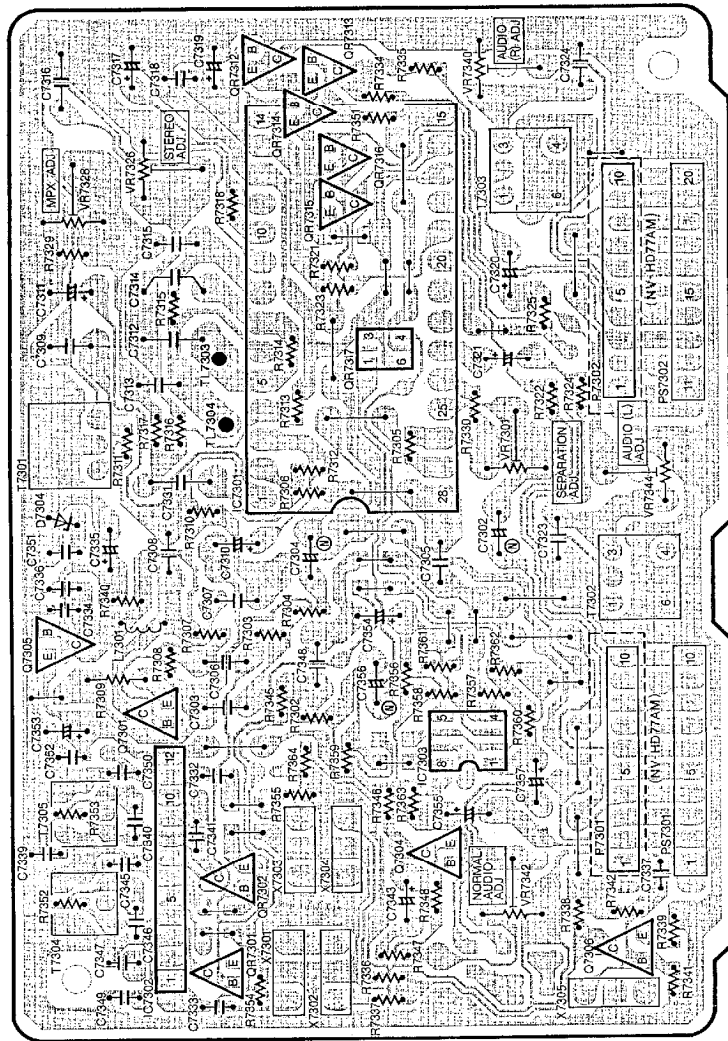


NOTE: DO NOT USE ANY PART NUMBER ORDERING. WHEN YOU ORDER



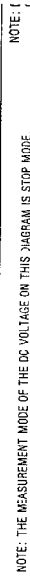
DECODER PACK C.B.A.			
Transistor	Adjustment		
VR7301	C-2	VR7301	A-3
VR7304	B-1	VR7328	C-4
VR7305	C-2	VR7328	C-3
VR7306	A-1	VR7340	A-4
VR7342	A-1	VR7342	A-1
VR7344	A-2	VR7344	A-2
Transistor & Resistor			
VR7301	B-1	VR7301	A-1
VR7302	B-1	VR7302	A-1
VR7303	B-1	VR7303	A-1
VR7304	B-1	VR7304	A-1
VR7305	B-1	VR7305	A-1
VR7306	B-1	VR7306	A-1
VR7307	B-1	VR7307	A-1
VR7308	B-1	VR7308	A-1
VR7309	B-1	VR7309	A-1
VR7310	B-1	VR7310	A-1
VR7311	B-1	VR7311	A-1
VR7312	B-1	VR7312	A-1
VR7313	B-1	VR7313	A-1
VR7314	B-1	VR7314	A-1
VR7315	B-1	VR7315	A-1
VR7316	B-1	VR7316	A-1
VR7317	B-1	VR7317	A-1
Integrated Circuit			
IC7301	B-3	IC7301	A-3
IC7302	C-1	IC7302	A-3
IC7303	B-2	IC7303	A-3

ADDRESS INFORMATION



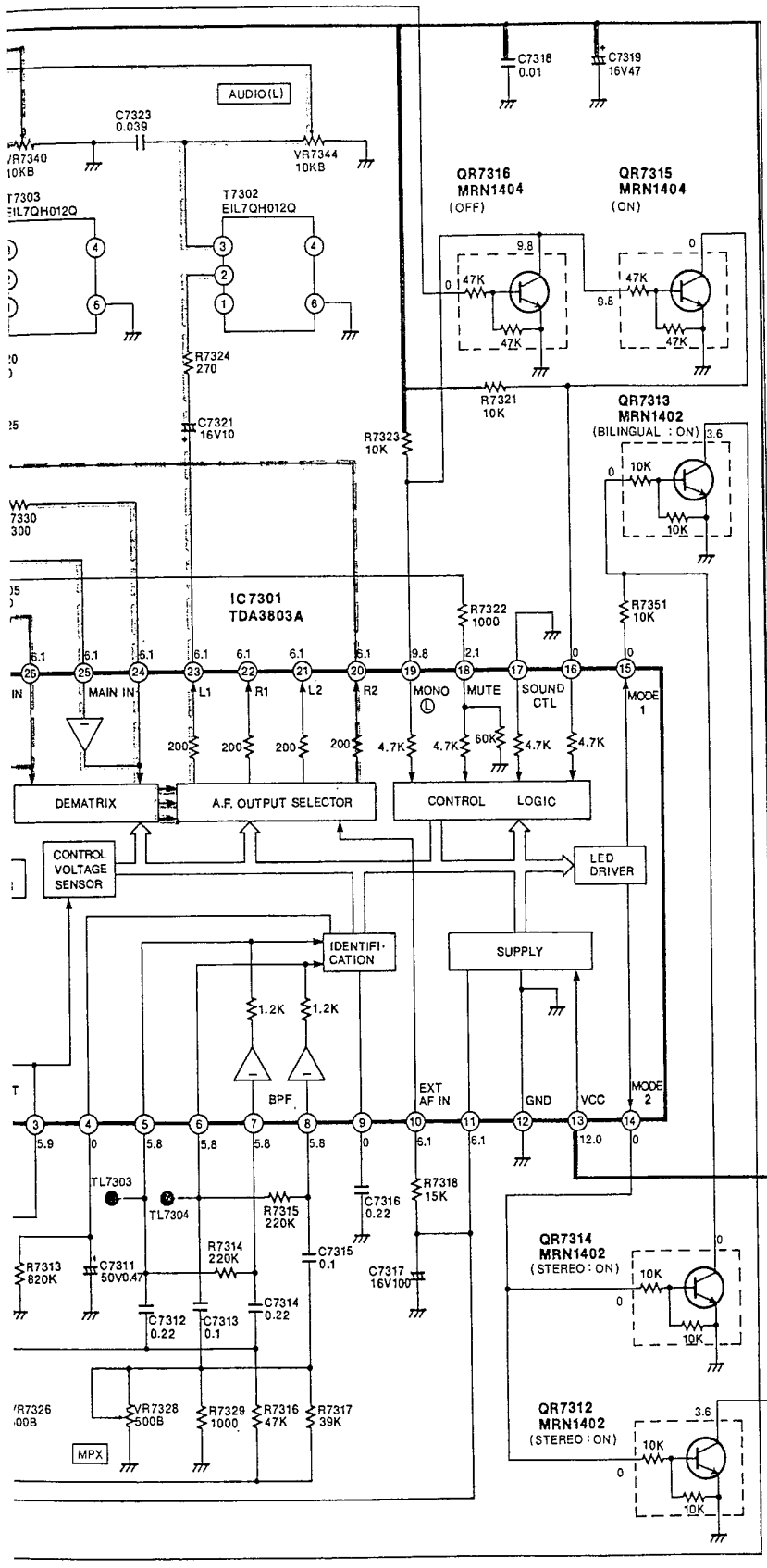
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

AUDIO MAIN SIGNAL PATH

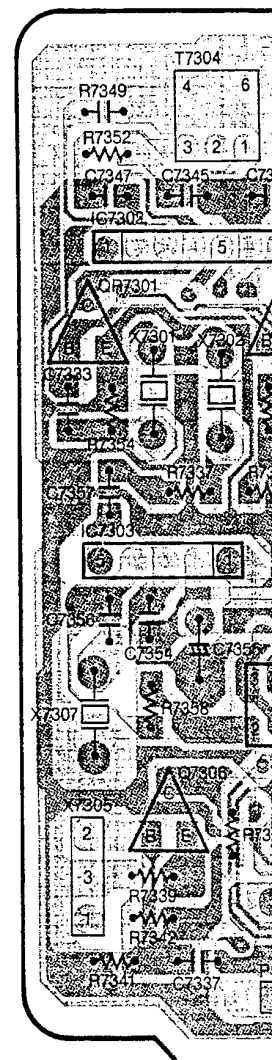


NAL PATH

AUDIO SUB SIGNAL PATH



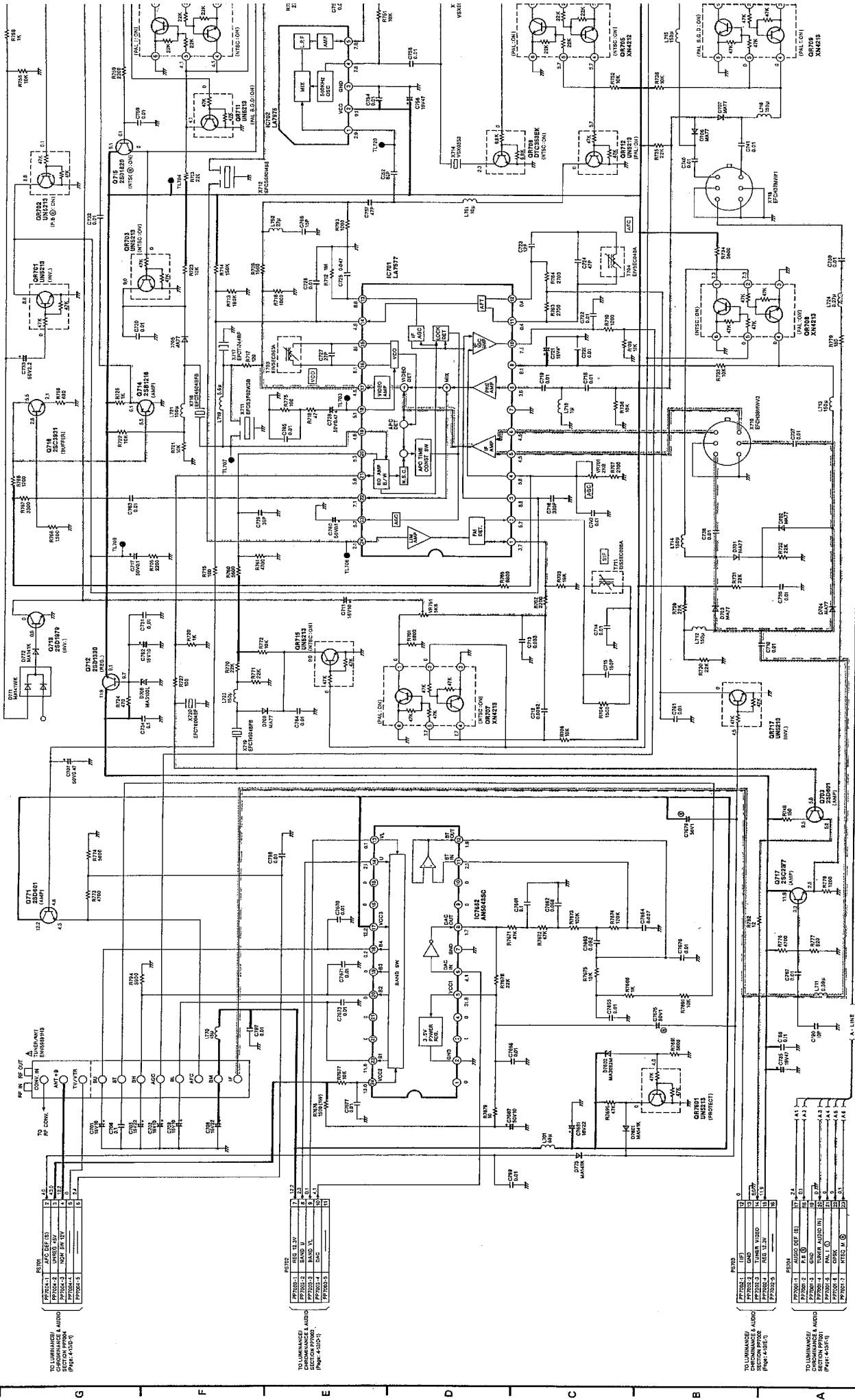
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



4-23 TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HD70AM, HD77AM)

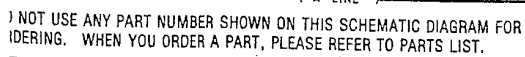
VIDEO SIGNAL PATH

AUDIO SIGNAL

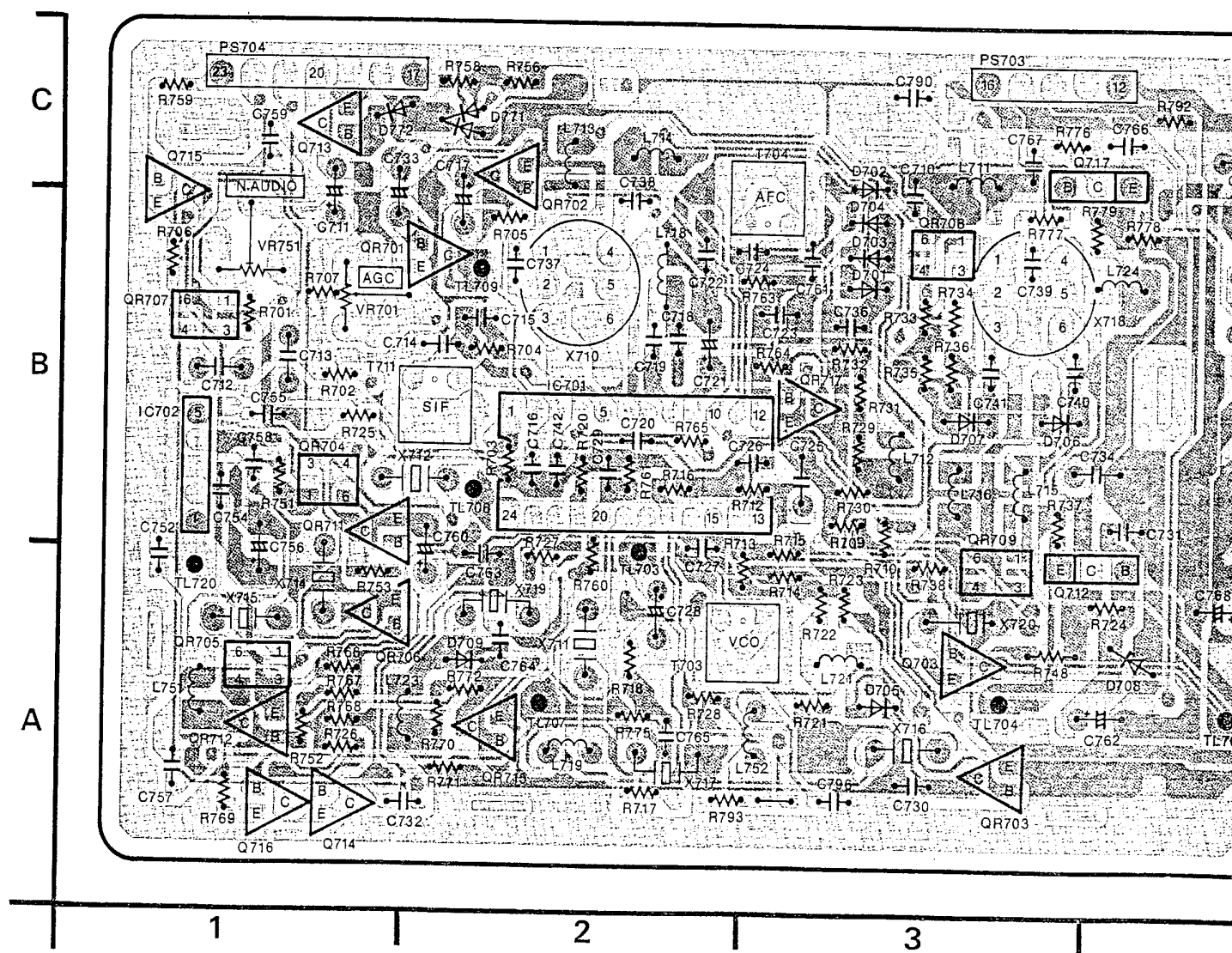


NOTE: THE MEASUREMENT MADE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MADE. NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DU ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS

4-24. TV DEMODULATOR PACK C B A

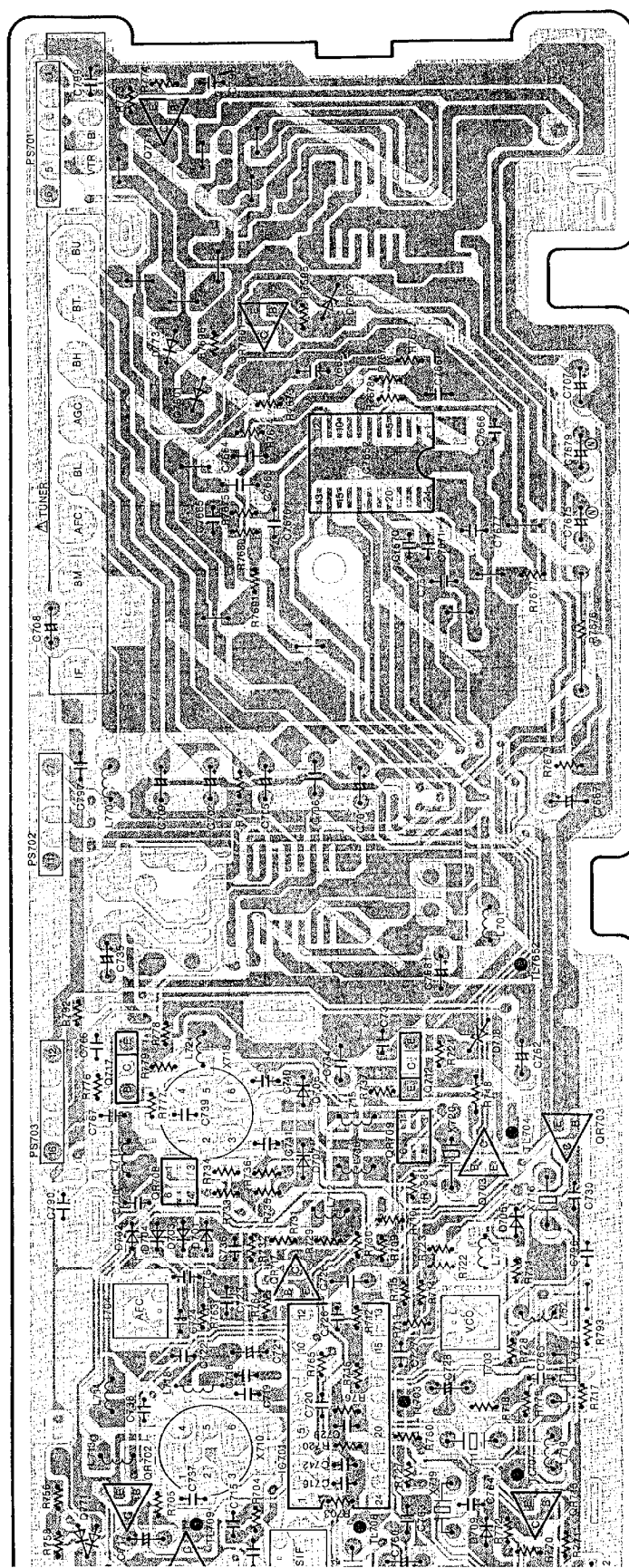


4-24. TV DEMODULATOR PACK C B A (VEP07723F: NV-HD70AM, HD77AM)

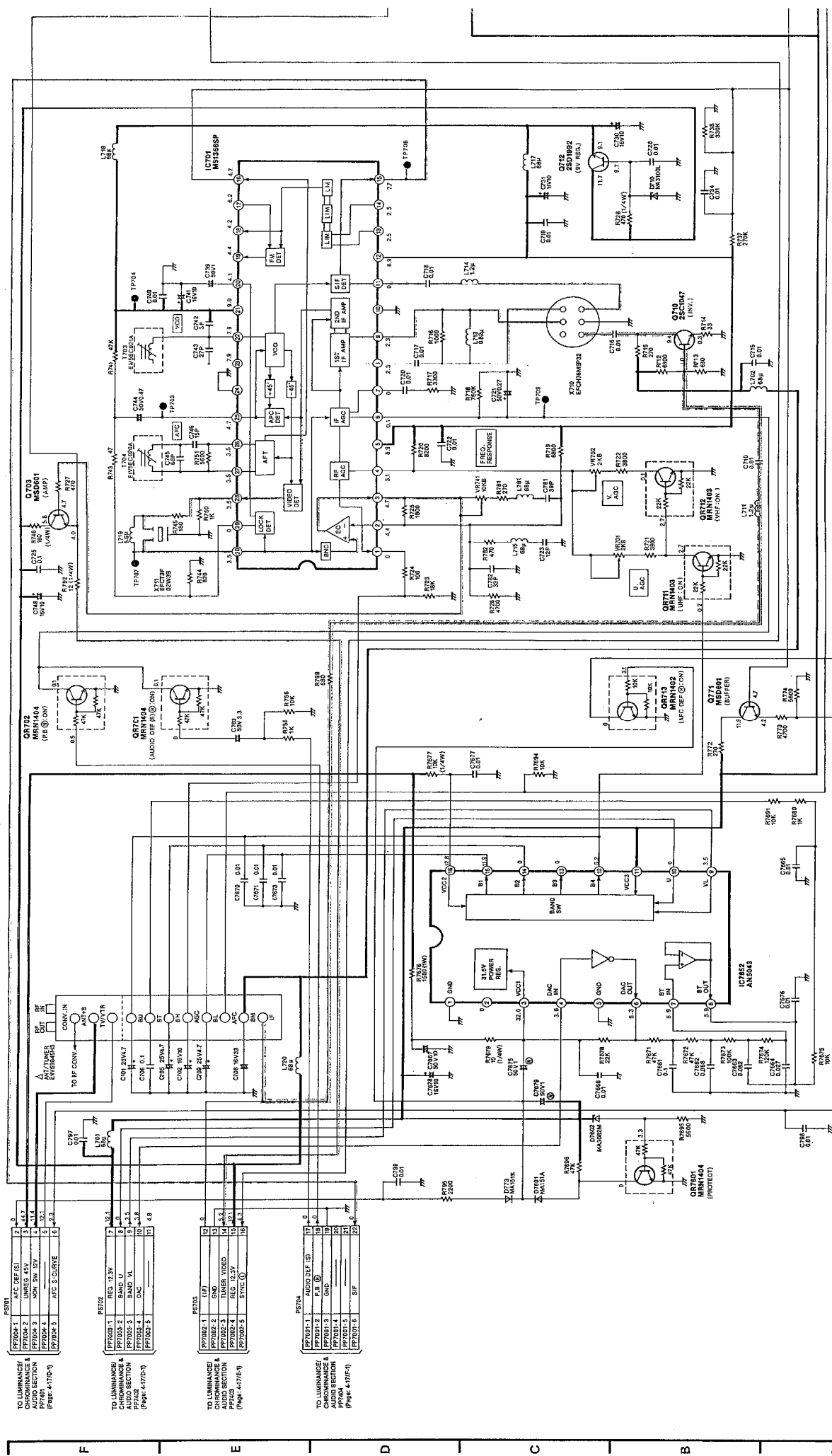


TV DEMODULATOR PACK C.B.A.	
Translator	
Q703	A-3
Q712	A-3
Q713	C-1
Q714	A-1
Q715	C-1
Q716	A-1
Q717	C-3
Q771	B-7
Translator & Resistor	
QF701	B-1
QF702	B-2
QF703	A-3
QF704	B-1
QF705	A-1
QF706	A-1
QF707	B-1
QF708	B-3
QF709	B-3
QF711	B-1
QF712	A-1
QF715	A-2
QF717	B-3
QF701	B-6
Integrated Circuit	
IC701	B-2
IC702	B-1
IC7652	B-6
Adjustment	
T703	A-2
T704	C-3
T711	B-1
VR701	B-1
VR751	B-1
Connector	
PS701	C-7
PS702	C-4
PS703	C-3
PS704	C-1

ADDRESS INFORMATION



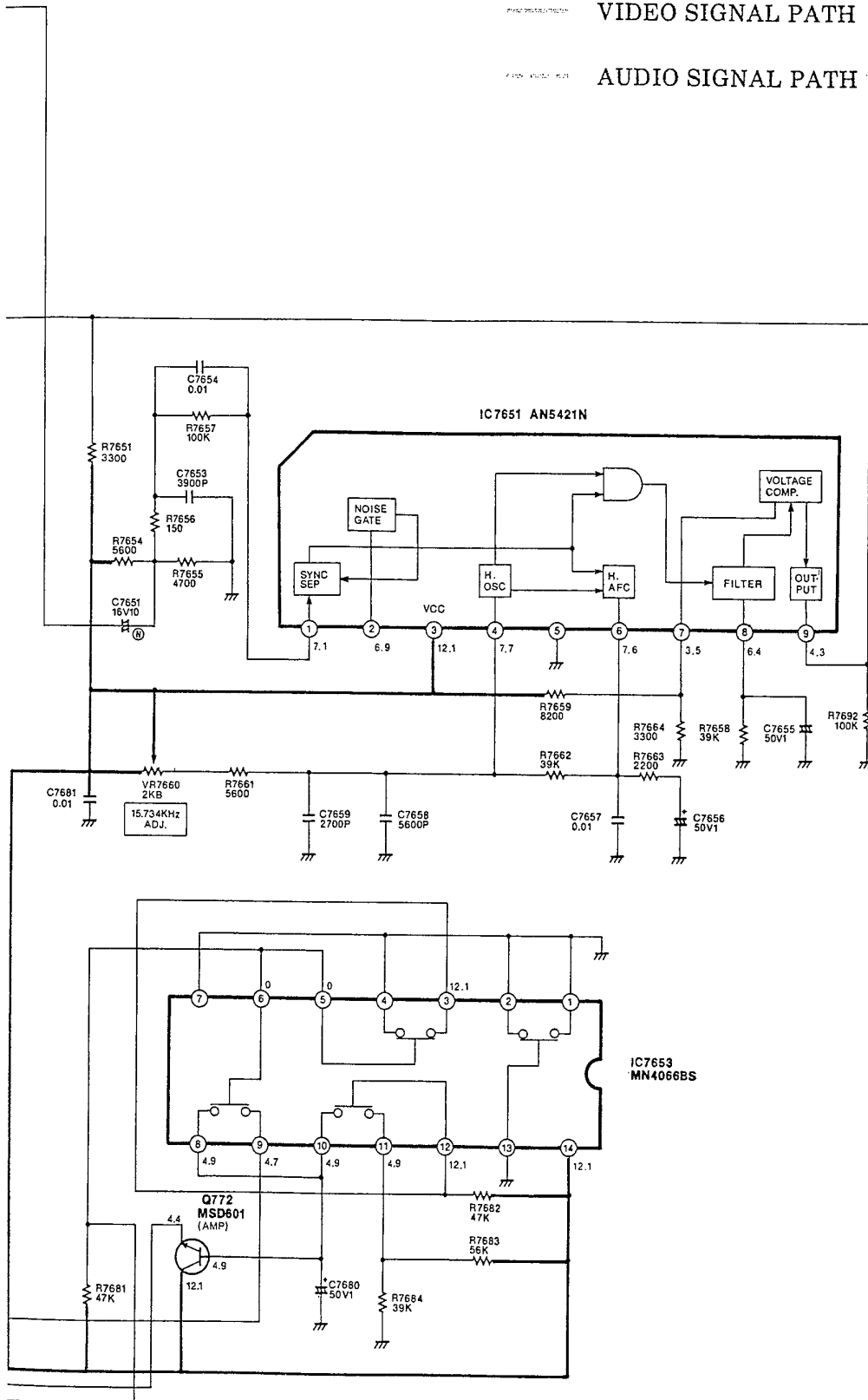
4-25. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (NV-HD90EE)



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK HAVE SPECIAL CHARACTERISTICS FOR SAFETY. NOTE: THE MEASUREMENT MADE OF THE DC VOLTAGE OF WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

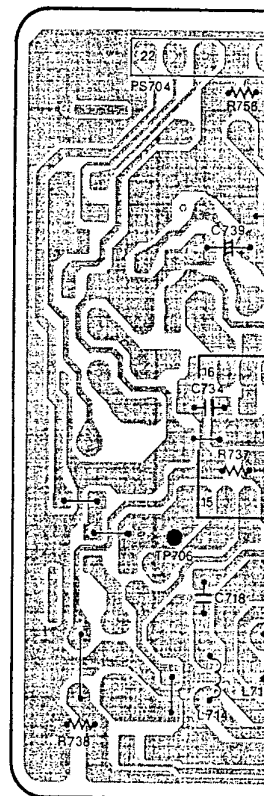
VIDEO SIGNAL PATH

AUDIO SIGNAL PATH



PAGE ON THIS DIAGRAM IS STOP MODE.

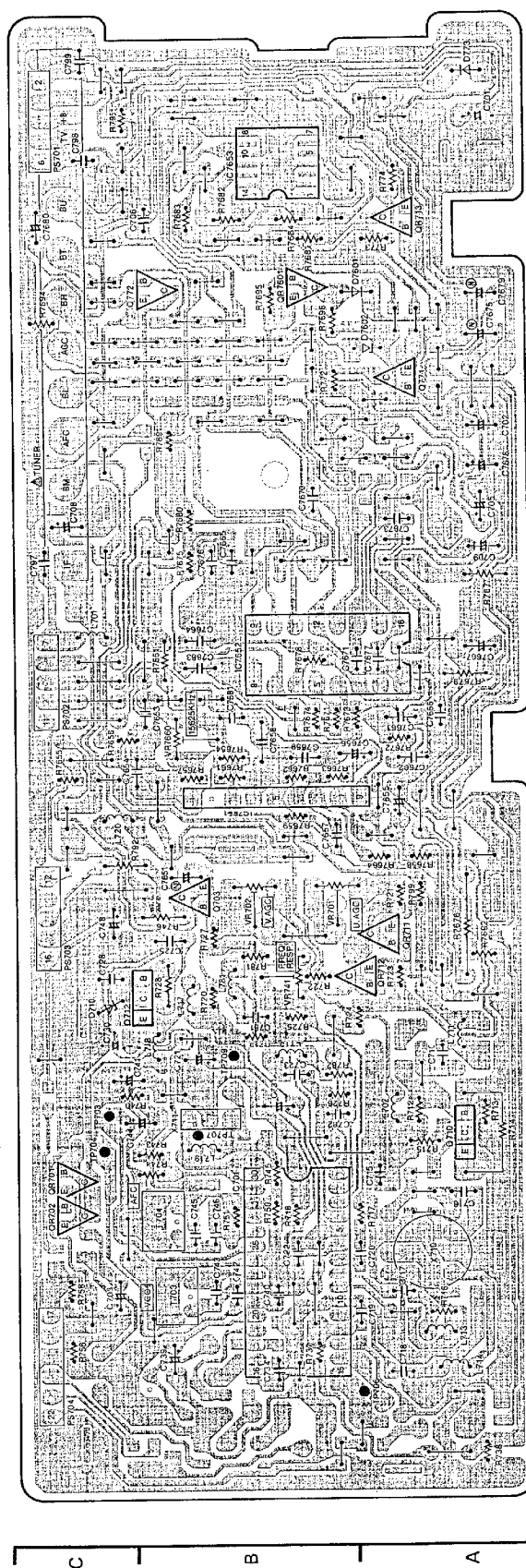
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.



4-26 TV DEMODULATOR PACK C.B.A. (VEP07645Z; NV-HD90EE)

TV DEMODULATOR PACK C.B.A.			
Transistor	Test Point		
CV703	B-4	TP703	C-3
CV740	A-2	TP704	C-2
CV712	C-3	TP706	A-1
CV771	A-6	TP707	B-2
CV772	B-6	TP709	B-3
Adjustment			
Transistor & Resistor			
GR701	C-2	TR03	B-2
GR702	C-3	TR04	B-2
GR711	A-3	VF701	B-4
GR712	A-7	VF702	B-4
GR713	A-7	VR741	B-3
GR7601	B-5	VR7650	B-4
Integrated Circuit			
IC7001	B-2	PS701	C-7
IC7851	B-4	PS702	C-4
IC7852	B-5	PS703	C-3
IC7853	B-7	PS704	C-1

ADDRESS INFORMATION

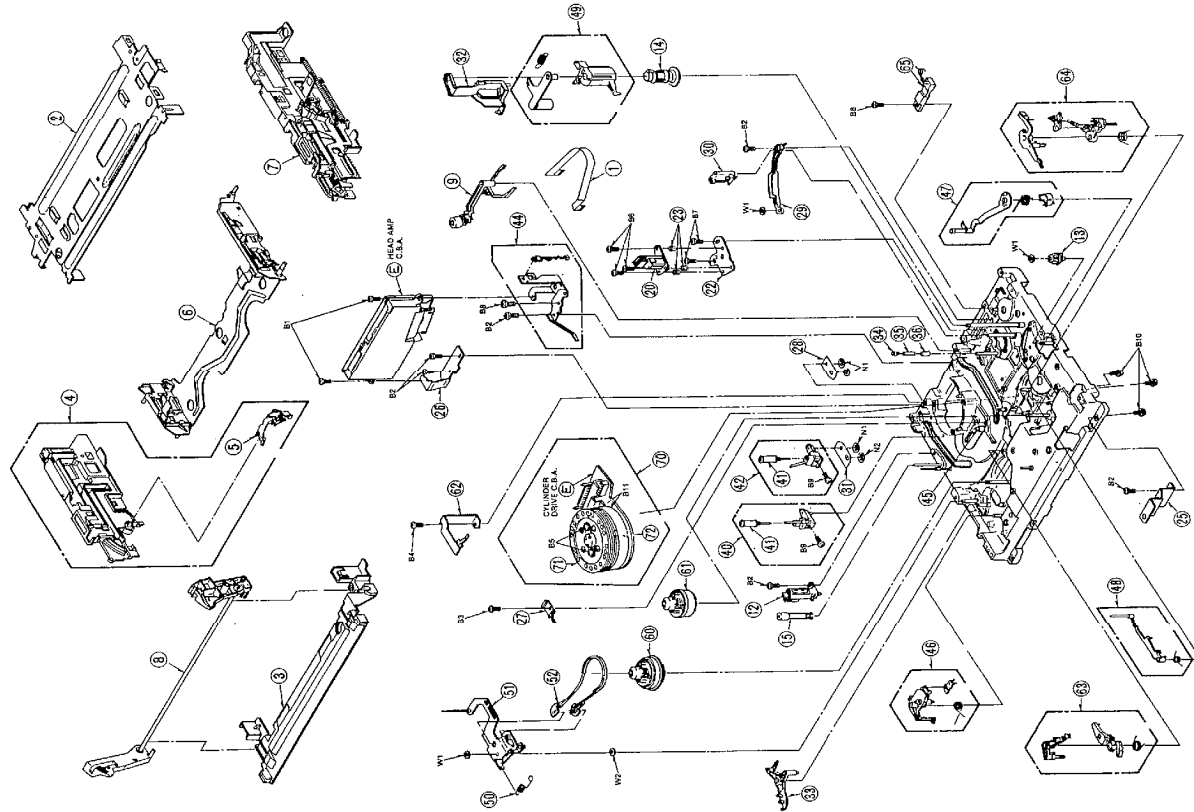


SECTION 5

EXPLODED VIEWS & PARTS LIST

5-1 EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)



5-1

5-2

Note: 1. Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICES

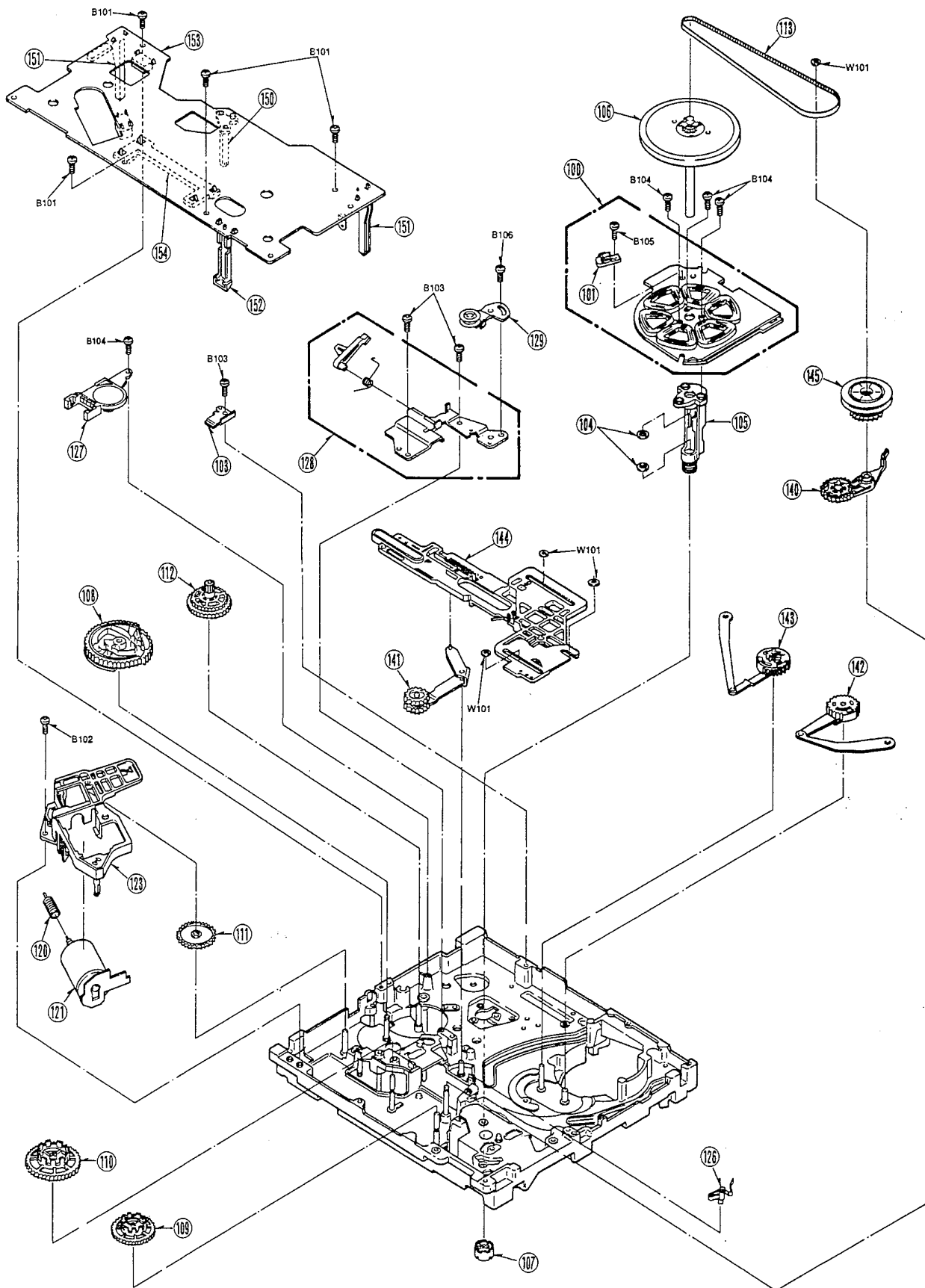
Components identified with the mark (†) have the special characteristics for safety. When replacing any of these components, use only the same type.

Note: 1. Be sure to make your orders of replacement parts according to this list.

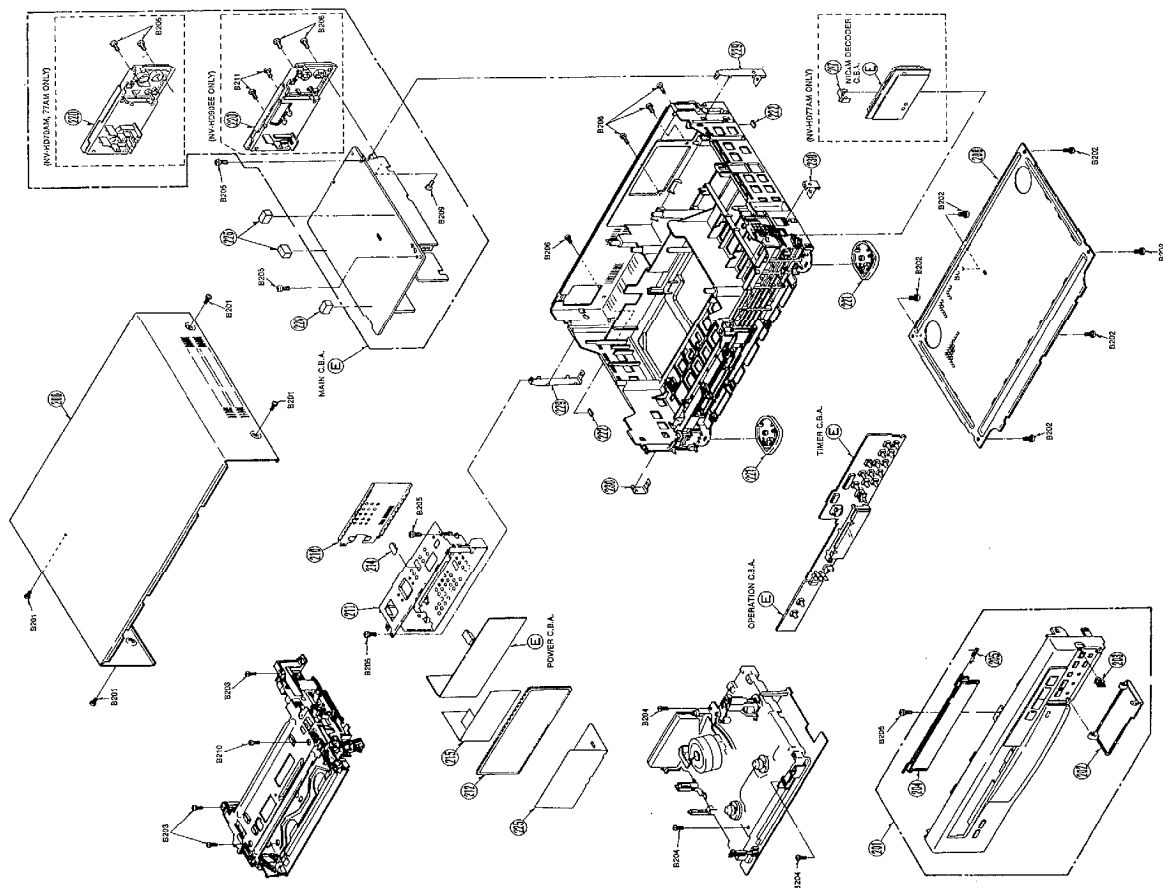
2. IMPORTANT SAFETY NOTICE
Components identified with the mark (<) have the special characteristics for safety. When replacing any of these components use only the same type.

Ref. No.	Part No.	Part Name & Description	Pos	Remarks	Ref. No.	Part No.	Part Name & Description	Pos	Remarks
					100(2)	W05977	STATOR UNIT	1	
					101(2)	W06061	PG HEAD	1	
					103(2)	W06830	MOTOR STOPPER	1	
					104(2)	W06197	OIL SEAL	2	
					105(2)	W00140	HOUSING UNIT	1	
1(1)	HA0043	FLEXIBLE CABLE (EP)	1	10403-PIB01	106(2)	W021350	ROTOR UNIT	1	
2(1)	W06544	TOP PLATE	1		107(2)	W002397	THRUST SCREW UNIT	1	
3(1)	W06579	CHASSIS GUIDE	1		108(2)	W005913	VALVE CWM GEAR	1	
4(1)	W06460	SIDE PLATE (L) UNIT	1		109(2)	W005915	SUPPLY REEL GEAR	1	
5(1)	W06250	SPINNER INVERT UNIT	1		110(2)	W005957	TAKE UP REEL GEAR	1	
6(1)	W06461	CHASSIS HOLDER PLATE UNIT	1		111(2)	W006868	ARM WHEEL GEAR	1	
7(1)	W06406	SIDE PLATE (R) UNIT	1		112(2)	W006885	SUB CWM GEAR	1	
8(1)	W06139	MAIN SHAFT UNIT	1		113(2)	W002395	THUMB BEAT	1	
9(1)	W06280	CLEANER ARM UNIT	1		120(2)	W006886	ARM GEAR	1	
10(1)	W06280	CLEANER ARM UNIT	1		121(2)	W06437	LOADING MOTOR (L) UNIT	1	
11(1)	W06280	CLEANER CONNECTION GEAR	1		123(2)	W06437	MOTOR BRACKET	1	
12(1)	W06371	CORNER CONNECTION GEAR	1		126(2)	W01275	ROLLER CONTROL LEVER	1	
13(1)	W06086	FINCH CWM GEAR	1		127(2)	W06138	WIDE SW	1	
14(1)	W06402	INTERFERENCE ROLLER UNIT	1		128(2)	W06139	SPR WHEEL	1	
15(1)	W06405	A/C HEAD (L) UNIT	1		129(2)	W064799	DETENTION ROLLER UNIT	1	
16(1)	W06574	A/C HEAD BASE	1		130(2)	W01376	ROLLER ARM UNIT	1	
17(1)	W06574	A/C HEAD SPRING	1		140(2)	W01372	THUMB LEVER UNIT	1	
18(1)	W06561	HEAD ANGLE	1		141(2)	W012299	SUPPLY LOADING ARM UNIT	1	
19(1)	W06563	HEAD IMP. MOUNT ANGLE (L)	1		142(2)	W012300	TAKE UP LOADING ARM UNIT	1	
20(1)	W06317	BRUSH SPRING	1		143(2)	W013507	MAIN LEVER UNIT	1	
21(1)	W06574	INCLINED BASE ROLLER (S)	1		145(2)	W021459	CENTER CUTOFF	1	
22(1)	W062978	P5 STOP STOPPER	1		150(2)	W01935	LED BOARD	1	
23(1)	W064927	P5 STOP STOPPER	1		151(2)	W01937	MOTOR TRANSDUCIVE ROLLER	2	
24(1)	W065873	INCLINED BASE ROLLER (T)	1		152(2)	W055946	SAFETY PIN SW	1	
25(1)	W062101	SPINNER PLATE	1		153(2)	W000653	REDUCENTARY CONNECTION C.B.	1	ELECTRICAL PARTS ON THE C.B. IS LISTED ON ELECTRICAL PARTS LIST.
26(1)	W062776	TENSION SPRING ARM	1						
27(1)	W061544	R4 UPPER LIMITER	1						
28(1)	W062179	P4 SLIDEWAY	1						
29(1)	W062176	P4 LAZER LIMITER	1		154(2)	W002039	REEL SHARP GUIDE	1	
30(1)	W065263	INCLINED BASE (S) INT.	1		160(2)	W007772	SCREW	4	
31(1)	W067415	ROLLER POST	2		162(2)	W072644F	SCREW	1	
32(1)	W065263	INCLINED BASE (T) INT.	1		163(2)	W072644F	SCREW	3	
33(1)	W065720	HEAD IMP. MOUNT ANGLE (R) L.	1		164(2)	W007253	SCREW	4	
34(1)	W065883	CASSETTE POSITION PLATE	1		165(2)	W007254	SCREW	1	
35(1)	W062510	SPINNER ARM UNIT	1		166(2)	W007254	SCREW	1	
36(1)	W062306	ARM UNIT	1		167(2)	W007254	SCREW	1	
37(1)	W062306	ARM UNIT	1		168(2)	W007254	SCREW	1	
38(1)	W062306	ARM UNIT	1		169(2)	W007254	SCREW	1	
39(1)	W062306	ARM UNIT	1						
40(1)	W062306	ARM UNIT	1						
41(1)	W062306	ARM UNIT	1						
42(1)	W062306	ARM UNIT	1						
43(1)	W062306	ARM UNIT	1						
44(1)	W062306	ARM UNIT	1						
45(1)	W062306	ARM UNIT	1						
46(1)	W062306	ARM UNIT	1						
47(1)	W062306	ARM UNIT	1						
48(1)	W062306	ARM UNIT	1						
49(1)	W062306	ARM UNIT	1						
50(1)	W062306	ARM UNIT	1						
51(1)	W062306	ARM UNIT	1						
52(1)	W062306	ARM UNIT	1						
60(1)	W06221	SUPPLY REEL TABLE UNIT	1						
61(1)	W06222	FACE OF REEL TABLE UNIT	1						
62(1)	W06223	FACE PLATE	1						
63(1)	W022312	SUPPLY BRACE ARM UNIT	1						
64(1)	W022313	TAKE UP BRACE ARM UNIT	1						
65(1)	W0594190W	POWER TRANSDUCER	1						
70(1)	W062113	SPINNER UNIT	1						
71(1)	W060601	UPPER CYLINDER UNIT	1						
72(1)	W063940	CYLINDER SHIELD PLATE	1						
81(1)	W060773	SCREW	2						
82(1)	W072644F	SCREW	6						
83(1)	W072644F	SCREW	1						
84(1)	W072644F	SCREW	1						
85(1)	W072644F	SCREW	1						
86(1)	W072644F	SCREW	1						
87(1)	W072644F	SCREW	1						
88(1)	W072644F	SCREW	1						
89(1)	W072644F	SCREW	2						
90(1)	W072644F	SCREW	2						
91(1)	W072644F	SCREW	2						
92(1)	W072644F	SCREW	2						
93(1)	W072644F	SCREW	2						
94(1)	W072644F	SCREW	2						
95(1)	W072644F	SCREW	2						
96(1)	W072644F	SCREW	2						
97(1)	W072644F	SCREW	2						
98(1)	W072644F	SCREW	2						
99(1)	W072644F	SCREW	2						
100(1)	W072644F	SCREW	2						
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102(1)	W072644F	SCREW	2						
103(1)	W072644F	SCREW	2						
104(1)	W072644F	SCREW	2						
105(1)	W072644F	SCREW	2						
106(1)	W072644F	SCREW	2						
107(1)	W072644F	SCREW	2						
108(1)	W072644F	SCREW	2						
109(1)	W072644F	SCREW	2						
110(1)	W072644F	SCREW	2						
111(1)	W072644F	SCREW	2						
112(1)	W072644F	SCREW	2						
113(1)	W072644F	SCREW	2						
114(1)	W072644F	SCREW	2						
115(1)	W072644F	SCREW	2						
116(1)	W072644F	SCREW	2						
117(1)	W072644F	SCREW	2						
118(1)	W072644F	SCREW	2						
119(1)	W072644F	SCREW	2						
120(1)	W072644F	SCREW	2						
121(1)	W072644F	SCREW	2						
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192(1)	W072644F	SCREW	2						
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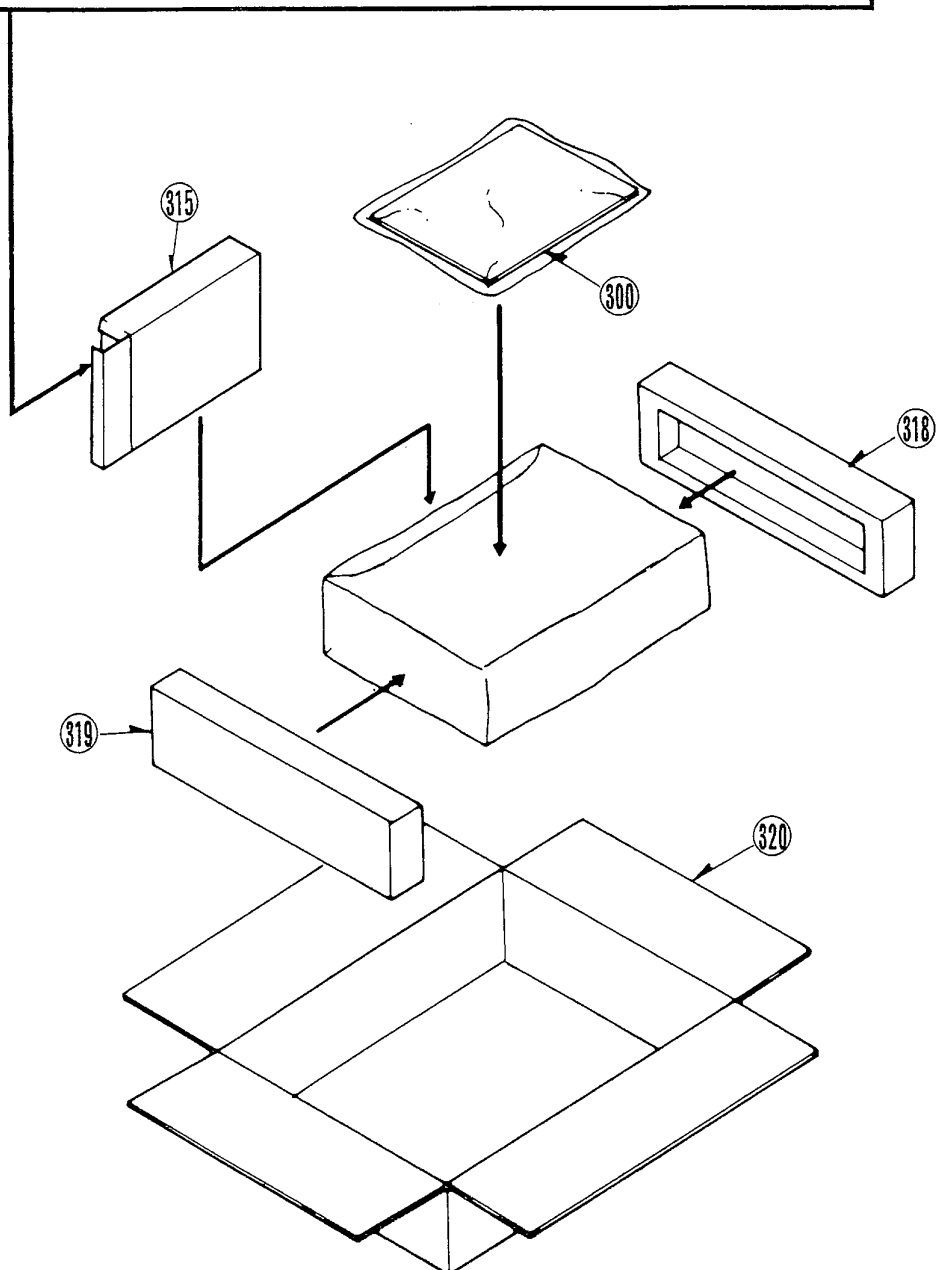
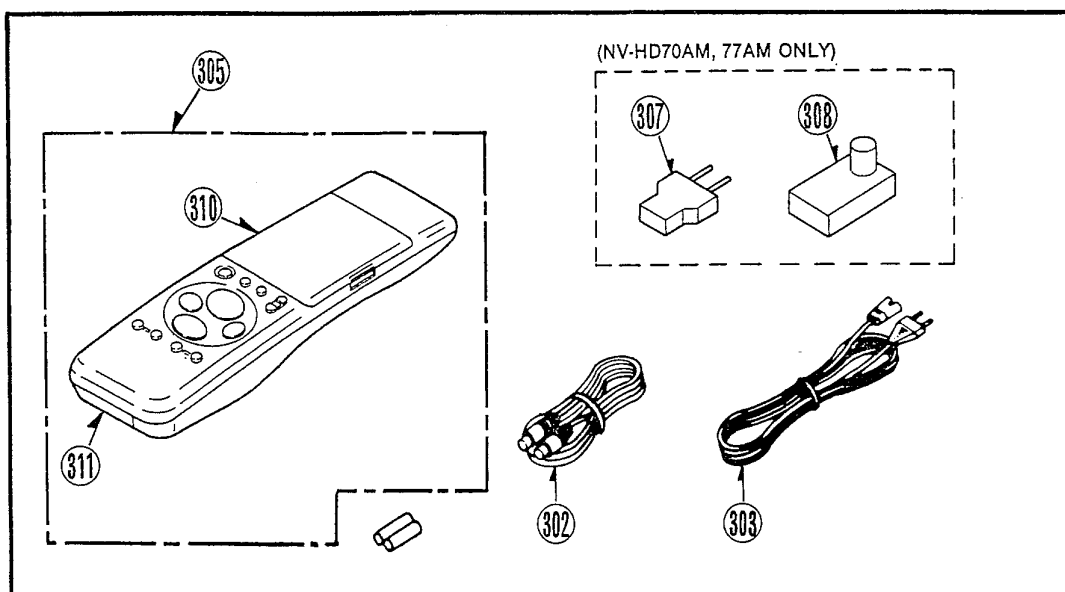
② CHASSIS PARTS SECTION (2)



③ CASING PARTS SECTION

[illegible]

④ PACKING PARTS SECTION



5-2 ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
 2. IMPORTANT SAFETY NOTICE : Components identified with the mark (<I>) have the special characteristics for safety. When replacing any of these components, use only the same type.
 3. Unless otherwise specified, All resistors are in OHMS, K-1,000 OHMS. All capacitors are in MICRO-FARADS(uf), P-uuf.
 4. The P.C. Board units marked with 'I' show below the main assembled parts.
 5. The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
*****	NV-HD70AM			
	NV-HD77AM			
	NV-HD90EE			
	VEPO3A88J	MAIN C.B.A. (Page:5-8)	1	(RTL)NV-HD70AM INCLUDING THE LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975C), HI-FI AUDIO PACK C.B.A. (VEPO4447PJ), TV DEMODULATOR PACK C.B.A. (VEPO7723F), DECORDER PACK C.B.A. (VEPO7725A).
	VEPO3975C	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HD70AM INCLUDED IN MAIN C.B.A. (VEPO3A88J). INCLUDING THE NTSC REC PACK C.B.A. (VEPO3888C).
	VEPO3888C	NTSC REC PACK C.B.A.	1	(RTL)NV-HD70AM INCLUDED IN LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975C).
	VEPO4447PJ	HI-FI AUDIO PACK C.B.A.	1	(RTL)NV-HD70AM INCLUDED IN MAIN C.B.A. (VEPO3A88J).
	VEPO7723F	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HD70AM INCLUDED IN MAIN C.B.A. (VEPO3A88J).
	VEPO7725A	DECORDER PACK C.B.A.	1	(RTL)NV-HD70AM INCLUDED IN MAIN C.B.A. (VEPO3A88J).
	VEPO3A88L	MAIN C.B.A. (Page:5-14)	1	(RTL)NV-HD77AM INCLUDING THE LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975C), HI-FI AUDIO PACK C.B.A. (VEPO4447PJ), TV DEMODULATOR PACK C.B.A. (VEPO7723F), DECORDER PACK C.B.A. (VEPO7725B).
	VEPO3975C	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HD77AM INCLUDED IN MAIN C.B.A. (VEPO3A88L). INCLUDING THE NTSC REC C.B.A. (VEPO3888C).
	VEPO3888C	NTSC REC C.B.A.	1	(RTL)NV-HD77AM INCLUDED IN LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975C).
	VEPO4447PJ	HI-FI AUDIO PACK C.B.A.	1	(RTL)NV-HD77AM

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
				INCLUDED IN MAIN C.B.A. (VEPO3A88L).
	VEPO7723F	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HD77AM
				INCLUDED IN MAIN C.B.A. (VEPO3A88L).
	VEPO7725B	DECORDER PACK C.B.A.	1	(RTL)NV-HD77AM INCLUDED IN MAIN C.B.A. (VEPO3A88L).
	VEPO3A88H	MAIN C.B.A. (Page:5-21)	1	(RTL)NV-HD90EE INCLUDING THE LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975F), HI-FI AUDIO PACK C.B.A. (VEPO4447PH), TV DEMODULATOR PACK C.B.A. (VEPO7645Z), DECORDER PACK C.B.A. (VEPO7743A).
	VEPO3975F	LUMINANCE & CHROMINANCE PACK C.B.A.	1	(RTL)NV-HD90EE INCLUDED IN MAIN C.B.A. (VEPO3A88H). INCLUDING THE DDR C.B.A. (VEPO3A02A).
	VEPO3A02A	DDR C.B.A.	1	(RTL)NV-HD90EE INCLUDED IN LUMINANCE & CHROMINANCE PACK C.B.A. (VEPO3975F).
	VEPO4447PH	HI-FI AUDIO PACK C.B.A.	1	(RTL)NV-HD90EE INCLUDED IN MAIN C.B.A. (VEPO3A88H).
	VEPO7645Z	TV DEMODULATOR PACK C.B.A.	1	(RTL)NV-HD90EE INCLUDED IN MAIN C.B.A. (VEPO3A88H).
	VEPO7743A	DECORDER PACK C.B.A.	1	(RTL)NV-HD90EE INCLUDED IN MAIN C.B.A. (VEPO3A88H).
	VEPO128	CYLINDER DRIVE C.B.A. (Page:5-27)	1	(RTL)
	VEPO5176C	HEAD AMP C.B.A. (Page:5-28)	1	(RTL)
	VEPO6931B	OPERATION C.B.A. (Page:5-28)	1	(RTL)
	VEPO7675C	NICAM DECORDER C.B.A. (Page:5-28)	1	(RTL)NV-HD77AM
	VEPO7752N	TIMER C.B.A. (Page:5-29)	1	(RTL)NV-HD70AM
	VEPO7752Q	TIMER C.B.A. (Page:5-30)	1	(RTL)NV-HD77AM
	VEPO7752M	TIMER C.B.A. (Page:5-31)	1	(RTL)NV-HD90EE
	VEPO1587F	POWER C.B.A. (Page:5-32)	1	(RTL)<I> NV-HD70AM/HD77AM
	VEPO1587D	POWER C.B.A. (Page:5-32)	1	(RTL)<I> NV-HD90EE
	-----	MECHANISM CONNECTION C.B.A.	1	NOT SUPPLIED AS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2048	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2049	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2050	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2051	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2052	ECEA0JKA101	E.CAPACITOR 6.3V 100P	1	
C3001	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3002, 03	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C3004	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3005	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3006	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3009	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3010	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3011	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3012	ECUM1H620JCN	C.CAPACITOR CH 50V 62P	1	
C3013	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3014	ECUM1H60JCN	C.CAPACITOR CH 50V 60P	1	
C3015	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3016	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3017	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3019	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3020	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3021	ECEA0JKA471	E.CAPACITOR 6.3V 47U	1	
C3022	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3023	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3024	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3025	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3026, 27	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3028, 29	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C3030	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3031	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3033	ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C3034	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3035	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3036	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3038	ECEA1AFS221	E.CAPACITOR 10V 220U	1	
C3905, 06	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	2	
C3911	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3914, 15	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	2	
C4001	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C4002	ECR02H331KH	C.CAPACITOR 500V 330P	1	
C4003	ECQ1P1332JZ	P.CAPACITOR 50V 3300P	1	
C4004	ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C4005	ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
C4006	ECEA16M33	E.CAPACITOR 16V 33U	1	
C4007	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4008	ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C4010	ECUM1H6832FN	C.CAPACITOR CH 50V 0.068U	1	
C4034	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C4503	ECUX1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C4504, 05	ECEA1CU470	E.CAPACITOR 16V 47U	2	
C4506	ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508	ECEA1ERN4R7	E.CAPACITOR 25V 4.7U	1	
C4509	ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513	ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515	ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518	ECUX1C1042FV	C.CAPACITOR CH 16V 0.1U	1	
C4521	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522	ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528	ECUX1C1042FV	C.CAPACITOR CH 16V 0.1U	1	
C4530	ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533	ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539	ECUM1C2242FV	C.CAPACITOR CH 16V 0.22U	1	
C4541	ECUX1C1042FV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4545	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4556	ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558	ECEA1ERN4R7	E.CAPACITOR 25V 4.7U	1	
C4559	ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563	ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565	ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568	ECUX1C1042FV	C.CAPACITOR CH 16V 0.1U	1	
C4572	ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585, 86	ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591	ECUX1C1042FV	C.CAPACITOR CH 16V 0.1U	1	
C4592	ECUX1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C4593	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594, 95	ECUM1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596	ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604	ECR1H1H102JN	C.CAPACITOR CH 50V 1800P	1	
C4606	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4611	ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4616	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4617	ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618	ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4621	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H123JZ	P.CAPACITOR 50V 0.012U	1	
C4636	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638	ECQB1H272JZ	P.CAPACITOR 50V 2700P	1	
C4652, 53	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	2	
C6001	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C6002	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C6003	ECEA1H802R2	E.CAPACITOR 50V 2.2U	1	
C6004	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C6005	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6006	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6007, 08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C6009	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6010	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C6011	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6012	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C6013	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C6014	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6015, 16	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6017	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6019	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6025-28	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	4	
C7005	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
C7006	ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C7007	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7010	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7011	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7012	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C7302	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152KZ	P.CAPACITOR 50V 1500P	1	
C7310	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7311	ECEA1HRR47	E.CAPACITOR 50V 0.47U	1	
C7312	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7319	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7320, 21	ECEA1CK100	E. CAPACITOR 16V 10U	2	
C7323, 24	ECQV1H393JZ	P. CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JM	P. CAPACITOR 50V 0.47U	1	
C7332, 33	ECUX1H102KCV	C. CAPACITOR CH 50V 1000P	2	
C7334	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7336	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	1	
C7337	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C7339	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1	
C7341	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7343	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7345	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JFN	C. CAPACITOR CH 50V 39P	1	
C7347	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P. CAPACITOR 50V 0.039U	1	
C7349, 50	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	2	
C7351, 52	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E. CAPACITOR 16V 47U	1	
C7354	ECEA1CK220	E. CAPACITOR 16V 22U	1	
C7355	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7356	ECEA1CKN100	E. CAPACITOR 16V 10U	1	
C7357	ECEA1CK100	E. CAPACITOR 16V 10U	1	
C7661	ECUM1H104KBM	C. CAPACITOR CH 50V 0.1U	1	
C7662	ECUM1H683KBM	C. CAPACITOR CH 50V 0.068U	1	
C7663	ECUM1H823KBM	C. CAPACITOR CH 50V 0.082U	1	
C7664	ECUM1H273KBM	C. CAPACITOR CH 50V 0.027U	1	
C7665, 66	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	2	
C7667	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7670, 71	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	2	
C7673	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	1	
C7675	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C7676, 77	ECUX1H1032FV	C. CAPACITOR CH 50V 0.01U	2	
C7679	ECEA1HKN010	E. CAPACITOR 50V 1U	1	
C7681	ECEA1CK220	E. CAPACITOR 16V 22U	1	
C8001	ECUM1C4742FN	C. CAPACITOR 16V 0.47U	1	
C8002-04	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	3	
C8006	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C8007	ECEA1AKS330	E. CAPACITOR 10V 33U	1	
C8008	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C8009	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C8010-12	ECEA1AKS330	E. CAPACITOR 10V 33U	3	
C8013	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C8014	ECUM1H561KBN	C. CAPACITOR CH 50V 560P	1	
C8015	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C8019	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C8020	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
D302	1SS283	DIODE	1	
D303	MA151A	DIODE	1	
D304	1SS254	DIODE	1	
D701-07	MA77	DIODE	7	
D708	MA3100L	DIODE	1	
D709	MA77	DIODE	1	
D771	MA141WK	DIODE	1	
D772, 73	MA141K	DIODE	2	
D801, 02	1SS254	DIODE	2	
D804	1SS254	DIODE	1	
D2001	1SS254	DIODE	1	
D2002	MA153	DIODE	1	
D2003, 04	1SS254	DIODE	2	
D2007, 08	1SS254	DIODE	2	
D2009	MA151WK	DIODE	1	
D2010	MA151K	DIODE	1	
D3001	MA151K	DIODE	1	
D3002, 03	1SS254	DIODE	2	
D4001	MA151K	DIODE	1	
D4003	MA151WK	DIODE	1	
D4004	MA723VT	DIODE	1	
D4005	MA151K	DIODE	1	
D4501-04	MA141K	DIODE	4	
D6001	1SS254	DIODE	1	
D6002	MA151K	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D6003	1SS254	DIODE	1	
D6005, 06	1SS254	DIODE	2	
D6007	MA4075-L	DIODE	1	
D7002	MA723VT	DIODE	1	
D7003	1SS254	DIODE	1	
D7004-06	11ES1	DIODE	3	
D7007	1SS254	DIODE	1	
D7304	MA3100L	DIODE	1	
D7601	MA141K	DIODE	1	
D7602	MA3082M	DIODE	1	
DL801	VLD0198	DELAY LINE	1	
FE	VJS1141	CONNECTOR (FEMALE)	1	
FL8001	ELM4N055	FILTER	1	
FL8002	ELM4L149	FILTER	1	
IC301	VERH29D	IC	1	
IC701	LA7577	IC	1	
IC702	LA7975	IC	1	
IC801	NJM2233BMA	IC	1	
IC802	M52352FP	IC	1	
IC2001	XRA6087-V3	IC	1	
IC2002	BA6871	IC	1	
IC2004	LM358PS	IC	1	
IC3001	NJM2233BL	IC	1	
IC3002	BA7004	IC	1	
IC4501	XIH7773KS	IC	1	
IC4601	BA7755AF	IC	1	
IC6001	MN67434VRSR	IC	1	
IC7301	TDA3803A	IC	1	
IC7302	TA8712SN	IC	1	
IC7303	TC4W66F	IC	1	
IC7652	AN5043SC	IC	1	
IC8001	BA7049FS	IC	1	
J3901, 02	VJJ0348	JACK	2	
L303	ELESQ220KA	COIL 22UH	1	
L304	ELESQ101KA	COIL 100UH	1	
L305	ELESQ121JA	COIL	1	
L306	ELESQ390KA	COIL 39UH	1	
L701	ELESQ680KA	COIL 68UH	1	
L711	ELJNAR39KF	COIL	1	
L712-16	ELJFA151KB	COIL 150UH	5	
L718	ELJNA1R0JF	COIL H	1	
L719	ELESQ5R6KA	COIL 5.6UH	1	
L721	ELJFA151KB	COIL 150UH	1	
L723	ELJFA151KB	COIL 150UH	1	
L724	ELJNAR27KF	COIL	1	
L751	ELJFA100KB	COIL	1	
L752	ELESQ270KA	COIL 27UH	1	
L770	ELESQ680KA	COIL 68UH	1	
L803	ELESQ5R6KA	COIL 5.6UH	1	
L804	ELESQ101KA	COIL 100UH	1	
L805	ELESQ270KA	COIL 27UH	1	
L807, 08	VLQ0540J150	COIL 15UH	2	
L809	ELESQ101KA	COIL 100UH	1	
L811, 12	ELESQ101KA	COIL 100UH	2	
L2001	VLPO074	COIL	1	
L2002	ELESE102KA	COIL 1000UH	1	
L2003, 04	VLQ0599J680	COIL	2	
L2005	VLPO083	COIL	1	
L2006	VLQ0599J680	COIL	1	
L3001	VLQ0599J680	COIL	1	
L3002	VLQ0599J151	COIL 150UH	1	
L3003	VLQ0599J820	COIL H	1	
L3005	VLQ0599J680	COIL	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3006	VLQ0599J101	COIL 100UH	1	
L3007,08	VLQ0599J680	COIL	2	
L3009	VLQ0599J120	COIL H	1	
L3010	VLQ0599J688	COIL H	1	
L3011	VLQ0599J680	COIL	1	
L3012	VLQ0599J270	COIL 27UH	1	
L3013	VLQ0599J680	COIL	1	
L4001,02	ERJ6GZOR00	M.RESISTOR 1/10W 0	2	
L4501,02	ELESE101KA	COIL 100UH	2	
L4601	VLQEL07F153J	COIL 15UH	1	
L6001	VLPO074	COIL	1	
L6005	VLQ0599J331	COIL H	1	
L7003	VLQ0599J1R0	COIL 1UH	1	
L7004	VLQ0599J680	COIL	1	
L7005	VLQ0599J1R0	COIL 1UH	1	
L7006	VLQ0599J680	COIL	1	
L7301	ELESQ102KA	COIL 1000UH	1	
L8002	ELESQ101KA	COIL 100UH	1	
L8003	ELESQ221KA	COIL 220UH	1	
L8004	VLQ0188J470	COIL 47UH	1	
P1001	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P2001	VJP1232T	CONNECTOR (MALE) 5P	1	
P2001	VJS1738T	CONNECTOR (FEMALE)	1	
P2002	VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3502	CONNECTOR (MALE)	1	
P2503	VJS3482	CONNECTOR (FEMALE)	1	
P2902	VJS1738T	CONNECTOR (FEMALE)	1	
P3001	VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P4001	VJS2331	CONNECTOR (FEMALE)	1	
P4002	VJP1230T	CONNECTOR (MALE) 3P	1	
P4002	VJS1230T	CONNECTOR (FEMALE)	1	
P6001	VJS3537A025G	CONNECTOR (FEMALE) 25P	1	
P6002	VJS3537A012G	CONNECTOR (FEMALE) 12P	1	
P6003	VJP1242T	CONNECTOR (MALE) 2P	1	
P6004	VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
FK4001-03	VJR0757B018T	CONNECTOR	3	
PP801	VJP3043A005W	CONNECTOR (MALE) 5P	1	
PP802	VJP3043A003W	CONNECTOR (MALE) 3P	1	
PP803	VJP3043A007W	CONNECTOR (MALE) 7P	1	
PP3001	VJP3044G009W	CONNECTOR (MALE) 9P	1	
PP3002	VJP3044G012W	CONNECTOR (MALE) 12P	1	
PP3003	VJP3044G006W	CONNECTOR (MALE) 6P	1	
PP7001	VJP3043A007W	CONNECTOR (MALE) 7P	1	
PP7002-04	VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7005	VJP3043A006W	CONNECTOR (MALE) 6P	1	
PS301	VJS3044F009W	CONNECTOR (FEMALE) 9P	1	
PS302	VJS3044F012W	CONNECTOR (FEMALE) 12P	1	
PS303	VJS3044F006W	CONNECTOR (FEMALE) 6P	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704	VJS3043B007W	CONNECTOR (FEMALE) 7P	1	
PS801	VJS3043B005W	CONNECTOR (FEMALE) 5P	1	
PS802	VJS3043B003W	CONNECTOR (FEMALE) 3P	1	
PS803	VJS3043B007W	CONNECTOR (FEMALE) 7P	1	
PS7301,02	VJR0477	PACK PIN	2	
Q703	MSD601-S	TRANSISTOR	1	
Q712	2SD1996-R	TRANSISTOR	1	
Q713	2SD1979-S	TRANSISTOR	1	
Q714	2SD1210-R	TRANSISTOR	1	
Q715	2SD1820	TRANSISTOR	1	
Q716	2SC3931-C	TRANSISTOR	1	
Q717	2SC2377	TRANSISTOR	1	
Q771	MSD601-S	TRANSISTOR	1	
Q1001	MSD1328	TRANSISTOR	1	
Q3001,02	MSD601-R	TRANSISTOR	2	
Q3003	MSB709-R	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3004,05	MSB601-R	TRANSISTOR	2	
Q3006	MSC2295	TRANSISTOR	1	
Q3007	MSB709-R	TRANSISTOR	1	
Q3008	MSC2295	TRANSISTOR	1	
Q3010	2SB709	TRANSISTOR	1	
Q4002	2SD602A-R	TRANSISTOR	1	
Q4003	MSD601	TRANSISTOR	1	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4552	2SD1819A	TRANSISTOR	1	
Q4601	2SD1819A	TRANSISTOR	1	
Q6001	2SD1991A	TRANSISTOR	1	
Q6002	MSB709-R	TRANSISTOR	1	
Q6004,05	2SB1321-R	TRANSISTOR	2	
Q7301	2SD1820-S	TRANSISTOR	1	
Q7304	2SD1820	TRANSISTOR	1	
Q7305	MSD601	TRANSISTOR	1	
Q7306	2SC2404-C	TRANSISTOR	1	
QR303	MRN2404	TRANSISTOR-RESISTOR	1	
QR306	MRN1404	TRANSISTOR-RESISTOR	1	
QR701-03	UN5213	TRANSISTOR-RESISTOR	3	
QR704,05	XN4212	TRANSISTOR-TRANSISTOR	2	
QR706	DTC363EK	TRANSISTOR-RESISTOR	1	
QR707-09	XN4213	TRANSISTOR-RESISTOR	3	
QR711,12	UN5213	TRANSISTOR-RESISTOR	2	
QR715	UN5213	TRANSISTOR-RESISTOR	1	
QR717	UN5213	TRANSISTOR-RESISTOR	1	
QR804	MRN2404	TRANSISTOR-RESISTOR	1	
QR805,06	MRN1404	TRANSISTOR-RESISTOR	2	
QR2001	UN2113T	TRANSISTOR-RESISTOR	1	
QR2002	UN2114	TRANSISTOR-RESISTOR	1	
QR2003	XN1213	TRANSISTOR-TRANSISTOR	1	
QR2004	UN2112T	TRANSISTOR-RESISTOR	1	
QR3001	UN2111T	TRANSISTOR-RESISTOR	1	
QR3002,03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3005	UN2212T	TRANSISTOR-RESISTOR	1	
QR4001,02	UN2213T	TRANSISTOR-RESISTOR	2	
QR4508,09	UN5113	TRANSISTOR-RESISTOR	2	
QR4510	UN5212	TRANSISTOR-RESISTOR	1	
QR4602	UN5111	TRANSISTOR-RESISTOR	1	
QR4603	UN5213	TRANSISTOR-RESISTOR	1	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6003	UN2211T	TRANSISTOR-RESISTOR	1	
QR6004	UN2212T	TRANSISTOR-RESISTOR	1	
QR7301,02	UN5213	TRANSISTOR-RESISTOR	2	
QR7312-14	UN5211	TRANSISTOR-RESISTOR	3	
QR7315,16	UN5213	TRANSISTOR-RESISTOR	2	
QR7317	XN4213	TRANSISTOR-RESISTOR	1	
QR7601	UN5213	TRANSISTOR-RESISTOR	1	
R304	ERJ6GZOR00	M.RESISTOR 1/10W 0	1	
R307	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R308	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R310	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R312	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R315	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R316	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R318,19	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R322	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R327	ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R701	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R702	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R703	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R704	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R705	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R706	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R707	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R709	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R710	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R712	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R713	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R714	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R715	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R716	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R717	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R718	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R720	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R721-23	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R724	VRE0040E471	M.RESISTOR CH 1/10W 470	1	
R725	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R726	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R727	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R728	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R729-32	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	4	
R733	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R734	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R735	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R736	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R737	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R738	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R748	VRE0040E151	M.RESISTOR CH 1/10W 150	1	
R751,52	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R753	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R756	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R758	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R759	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R760	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R761	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R763,64	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R765	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R766	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R767	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R768	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R769	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R770,71	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R772	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R773	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R774	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R775	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R776	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R777	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R778	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R779	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R792	ERJ3GEYJ120	M.RESISTOR CH 1/16W 12	1	
R793	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R794	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R813	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R814	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R815	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R816	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R817	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R818	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R819	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R820,21	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R822	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R823,24	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R827	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R828	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R829	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R830	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R831	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R832	ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R833	ERJ6GEYJ204	M.RESISTOR CH 1/10W 200K	1	
R834	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R835	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R836	ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R848	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R849	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R850	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R853	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R855	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R857	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R858	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R859	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R1001	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2001	ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R2002	ERJ6GEYJ913	M.RESISTOR CH 1/10W 91K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2003	ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2004-06	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R2007,08	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R2009	ERX12SJH47	M.RESISTOR 1/12W 0.47U	1	
R2010	ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2011,12	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	2	
R2013	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2014	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R2015,16	ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2017	ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2018	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019	ERJ6GEYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R2020	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2021	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2022	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R2023	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R2024	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2025	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2026	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R2027,28	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2031	ERJ6GEYJ244	M.RESISTOR CH 1/10W 220K	1	
R2032	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GEYJ133	M.RESISTOR CH 1/10W 13K	1	
R2034	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2035	ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R2036,37	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2040	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2041	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2045	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2046	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2047	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2048	ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R2050	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R2051	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2053,54	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R2055	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R2056,57	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R2060	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R3001	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3002	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3003	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3004	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3007	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008	ERJ6GEYJ601	M.RESISTOR CH 1/10W 680	1	
R3009	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3011	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3012,13	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R3014	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3015,16	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R3017	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R3018	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3019,20	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R3021	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3022	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3024	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3025	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3026,27	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3028	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3029	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R3030	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3032	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3033	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3035,36	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R3037	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3906	ERJ6GMJ750	M.RESISTOR CH 1/10W 75	1	
R3907	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3909	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3912	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3913	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	1	
R3914	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R3915	ERJ6GMJ750	M.RESISTOR CH 1/10W 75	1	
R3917	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R3919	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	1	
R3920	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R4001	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4002	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R4003	ERJ6GMJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4004	ERJ6GMJ183	M.RESISTOR CH 1/10W 18K	1	
R4005	ERJ6GMJ823	M.RESISTOR CH 1/10W 82K	1	
R4006	ERJ6GMJ273	M.RESISTOR CH 1/10W 27K	1	
R4007	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R4008	ERJ6GMJ823	M.RESISTOR CH 1/10W 82K	1	
R4009	ERJ6GMJ100	M.RESISTOR CH 1/10W 10	1	
R4010, 11	ERJ6GMJ823	M.RESISTOR CH 1/10W 82K	2	
R4014	ERJ6GMJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	1	
R4501, 02	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR CH 1/10W	1	
R4506, 07	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509	VRE0071E622	M.RESISTOR CH 1/10W	1	
R4511	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4513	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4518, 19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4522	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2K	1	
R4527	VRE0071E333	M.RESISTOR CH 1/10W	1	
R4528	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4529	ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4542	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551, 52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553, 54	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562	VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R4563	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568, 69	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578	VRE0071E473	M.RESISTOR CH 1/10W 47K	1	
R4581	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4585	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R4586	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4587, 88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596	ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R4597	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598, 99	ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603	ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606	VRE0071E562	M.RESISTOR	1	
R4610	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612	VRE0071E331	M.RESISTOR CH 1/10W	1	
R4613	ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615	VRE0071E133	M.RESISTOR CH 1/10W	1	
R4616	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4649	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4651	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4653	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R4654	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4655	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R4656	ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4670	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R4671	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R6001	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6002	ERJ6GMJG272	M.RESISTOR CH 1/10W 2.7K	1	
R6004	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	1	
R6005-07	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	3	
R6008	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009-11	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	3	
R6012	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6013	EROS2CHG2009	M.RESISTOR 1/4W 200	1	
R6014, 15	ERJ6GMJG223	M.RESISTOR CH 1/10W 22K	2	
R6016	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6017	ERJ6GMJ271	M.RESISTOR CH 1/10W 270	1	
R6018	ERJ6GMJ683	M.RESISTOR CH 1/10W 68K	1	
R6019	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6020	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6021	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6022	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R6023	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R6024-29	ERJ6GMJ102	M.RESISTOR CH 1/10W 1K	6	
R6030, 31	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R6032, 33	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6034, 35	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	2	
R6036	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R6037	ERJ6GMJ224	M.RESISTOR CH 1/10W 220K	1	
R6038	ERJ6GMJ223	M.RESISTOR CH 1/10W 22K	1	
R6039	ERJ6GMJ183	M.RESISTOR CH 1/10W 18K	1	
R6040	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	1	
R6042	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R6043	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6044	ERJ6GMJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6048	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6049	ERJ6GMJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6050	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6051	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7001, 02	ERJ6GMJ151	M.RESISTOR CH 1/10W 150	2	
R7004	ERJ6GMJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7302	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7303	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7304	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7305	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7306	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7307	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7308	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R7309	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
R7311	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7312	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7313	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R7314, 15	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	2	
R7316	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7317	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7318	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R7321	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7322	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7323	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7324, 25	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R7329	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7330	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R7334-37	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	4	
R7338	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7339	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R7340	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7341	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7342	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7345	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7346	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7347	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7348	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7351-53	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7354,55	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7356-58	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	3	
R7359	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7360-62	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	3	
R7363	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R7364	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R7671,72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7673	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7674	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R7675	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7676	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7677	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7678	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7679	VRD0040E100	M.RESISTOR CH 1/10W 10	1	
R7680	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7691	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7695	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7696	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R8001	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8002,03	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8004	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R8005	ERJ6GEYJ000	M.RESISTOR CH 1/10W 0	1	
R8007	ERJ6GEYJ000	M.RESISTOR CH 1/10W 0	1	
R8008,09	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8010	ERJ6GEYJ911	M.RESISTOR CH 1/10W 910	1	
R8011	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8014	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R8015	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R0016	ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
SW3901	VSS0233	SWITCH	1	
T703	EIV5ECO63A	TRANSFORMER	1	
T704	EIV5ECO40A	TRANSFORMER	1	
T711	EIS5ECO08A	TRANSFORMER	1	
T4001	EI07QF014Q	TRANSFORMER	1	
T7301	EIR7QGO01B	TRANSFORMER	1	
T7302,03	EIL7QHD12Q	TRANSFORMER	2	
T7304	EIS5ECO07A	TRANSFORMER	1	
T7305	EIS5ECO05A	TRANSFORMER	1	
TR	VJS3481	CONNECTOR (FEMALE)	1	
VR701	EVNCBAA00B23	V.RESISTOR	1	
VR751	EVNCBAA00B53	V.RESISTOR	1	
VR803	EVNCBAA00B14	V.RESISTOR	1	
VR2001	EVNDKAA00B54	V.RESISTOR 50K	1	
VR2006	EVNDKAA00B15	V.RESISTOR 100K	1	
VR2011	EVNDKAA00B15	V.RESISTOR 100K	1	
VR3001	EVNDKAA00B23	V.RESISTOR 5K	1	
VR3012,13	EVNDKAA00B52	V.RESISTOR 500	2	
VR4001	EVNDKAA00B25	V.RESISTOR 200K	1	
VR4501	EVMECSA00B53	V.RESISTOR	1	
VR4502	EVMECSA00B54	V.RESISTOR	1	
VR4507	EVMECSA00B54	V.RESISTOR	1	
VR4509	EVMECSA00B53	V.RESISTOR	1	
VR4550	EVMECSA00B53	V.RESISTOR	1	
VR4551,52	EVMECSA00B55	V.RESISTOR	2	
VR7301	EVTEASA00B14	V.RESISTOR	1	
VR7326	EVTEASA00B52	V.RESISTOR	1	
VR7328	EVTEASA00B52	V.RESISTOR	1	
VR7340	EVNCBAA00B14	V.RESISTOR	1	
VR7342	EVNCBAA00B14	V.RESISTOR	1	
VR7344	EVNCBAA00B14	V.RESISTOR	1	
VR8001	EVNDKAA00B23	V.RESISTOR 5K	1	
X710	EPCH38MW3	CRYSTAL OSCILLATOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
X711	EPFCS3F02W3B	CRYSTAL OSCILLATOR	1	
X712	EPFCS6R0MS5	CRYSTAL OSCILLATOR	1	
X714	VSK0553	CRYSTAL OSCILLATOR	1	
X715	VSK0547	CRYSTAL OSCILLATOR	1	
X716	EPFCS4504BFB	CRYSTAL OSCILLATOR	1	
X717	EPFCS5744BF	CRYSTAL OSCILLATOR	1	
X718	EPCH32MWP1	CRYSTAL OSCILLATOR	1	
X719	EPFCS4504BFB	CRYSTAL OSCILLATOR	1	
X720	EPFCS6004BF	CRYSTAL OSCILLATOR	1	
X801	VSK0162	CRYSTAL OSCILLATOR	1	
X3001	VSK0099	CRYSTAL OSCILLATOR	1	
X6001	VSK0609	CRYSTAL OSCILLATOR	1	
X7301,02	EPFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04	EPFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305	ELB5A016	CRYSTAL OSCILLATOR	1	
X8001	VSK0473	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	ENC17992A	RF CONVERTER	1	(1)
	VJH0756	I/O JACK PLATE	1	
	VEE8474	WIRE CABLE	1	(P2001-P2902)
	VEE8564	WIRE CABLE	1	(P2003-POWER TR.)
	VEE8969	WIRE CABLE	1	(P4002-FE HEAD)
	VWJ25C9200BB	FLAT CARD CABLE	1	(P6001-P7501)
	VWJ12C9200BB	FLAT CARD CABLE	1	(P6002-P7502)
	VWJ0745	FLAT CARD CABLE	1	(P3001-P501)
	VWJ0746	FLAT CARD CABLE	1	(P6004-P1505)
	VWJ0825	FLAT CARD CABLE	1	(P2002-CAPSTAN)
	VWJ0826B	FLAT CARD CABLE	1	(P1001-P1102)
	VJF1031	CLAMPER	1	
	ENV590B1H3	TUNER	1	(1) FOR TV DEMODU.
	VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMODULATOR
	VSC3815	SHIELD COVER (TOP)	1	FOR TV DEMODULATOR
	VEP03A88L	MAIN C.B.A.		(RTL)NV-HD77AM
C305	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C306,07	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C308	ECEA1EKQAR7	E.CAPACITOR 25V 4.7U	1	
C310	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C311	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C312	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C313,14	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C315	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C319	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C320	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C321	ECUM1H333JCN	C.CAPACITOR CH 50V 0.033U	1	
C701,02	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C705	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C706	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C707	ECEA1HQR47	E.CAPACITOR 50V 0.47U	1	
C708	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C709	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C710	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C711	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C712	ECQB1H822JH	P.CAPACITOR 50V 8200P	1	
C713	ECQV1H333JZ	P.CAPACITOR 50V 0.033U	1	
C714	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C715	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C716	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C717	ECEA1HQR1	E.CAPACITOR 50V 0.1U	1	
C718-20	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C721	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C722	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C723	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C724	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C725	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C726	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C727	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C728	ECEA1HQR47	E.CAPACITOR 50V 0.47U	1	
C729	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C730-32	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	3	
C733	ECFA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C734	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C735	ECFA1CK470	E.CAPACITOR 16V 47U	1	
C736-42	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	7	
C752	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C754,55	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	2	
C756	ECFA1CK470	E.CAPACITOR 16V 47U	1	
C757	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C758,59	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	2	
C760	ECFA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C761	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C762	ECFA1CK100	E.CAPACITOR 16V 10U	1	
C763-67	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	5	
C790	ECUX1H100JCV	C.CAPACITOR CH 50V 10P	1	
C796	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C797-99	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	3	
C805	ECFA0JK221	E.CAPACITOR 6.3V 220	1	
C806	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C807	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C808	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C812-14	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C815	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C816	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C817	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C818	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C819	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C820-25	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	6	
C826	ECFA0JK101	E.CAPACITOR 6.3V 100U	1	
C827	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C828	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C829	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C830	ECFA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C831	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C832	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C838	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C839	ECUM1H100JCN	C.CAPACITOR CH 50V 10P	1	
C841	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C842	ECFA0JK101	E.CAPACITOR 6.3V 100U	1	
C843	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C845	ECFA1HK010	E.CAPACITOR 50V 1U	1	
C846	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C848-50	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C1001	ECFA1EM101	E.CAPACITOR 25V 100U	1	
C1002	ECFA1AFS221	E.CAPACITOR 10V 220U	1	
C1003	ECFA0JKA330	E.CAPACITOR 6.3V 33U	1	
C1004	ECFA1CKA330	E.CAPACITOR 16V 33U	1	
C1005	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C1006	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2001	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2002	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2003	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C2004	ECFA1CKA101	E.CAPACITOR 16V 100U	1	
C2005,06	ECFA1HKNR47	E.CAPACITOR 50V 0.47U	2	
C2007	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2008	ECFA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2009,10	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C2011,12	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C2013	ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C2014	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C2015,16	ECFA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C2017	ECFA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C2018,19	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C2020	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2021	ECFA0JM221	E.CAPACITOR 6.3V 220U	1	
C2022	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C2023	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2024	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C2025,26	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	2	
C2027	ECFA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2028	ECFA1HKVR3	E.CAPACITOR 50V 3.3U	1	
C2029	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C2030	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2031	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2032	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033	ECFA0JM221	E.CAPACITOR 6.3V 220U	1	
C2034	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C2035	ECFA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2036	ECFA0JKA220	E.CAPACITOR 6.3V 22U	1	
C2037	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C2038	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2039	ECFA1HKMR7	E.CAPACITOR 50V 4.7U	1	
C2040	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2041	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C2042	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2043	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C2044	ECFA1HKA010	E.CAPACITOR 50V 1U	1	
C2045	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C2046	ECFA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2047	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2048	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C2049	ECFA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2050	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2051	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C2052	ECFA0JM101	E.CAPACITOR 6.3V 100P	1	
C3001	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3002,03	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C3004	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3005	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3006	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3007	ECFA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C3009	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3010	ECFA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3011	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3012	ECUM1H620JCN	C.CAPACITOR CH 50V 62P	1	
C3013	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3014	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3015	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3016	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3017	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3019	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3020	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3021	ECFA0JM471	E.CAPACITOR 6.3V 47U	1	
C3022	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3023	ECFA1CKA470	E.CAPACITOR 16V 47U	1	
C3024	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3025	ECFA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3026,27	ECFA1CKA100	E.CAPACITOR 16V 10U	2	
C3028,29	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	2	
C3030	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C3031	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C3033	ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C3034	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C3035	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3036	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3038	ECFA1AFS221	E.CAPACITOR 10V 220U	1	
C3905,06	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	2	
C3911	ECFA1CKA100	E.CAPACITOR 16V 10U	1	
C3914,15	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	2	
C4001	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C4002	ECQD2H331NB	C.CAPACITOR 500V 330P	1	
C4003	ECQP1332JZ	P.CAPACITOR 50V 3300P	1	
C4004	ECQB1H102JZ	F.CAPACITOR 50V 1000P	1	
C4005	ECQB1H153JZ	P.CAPACITOR 50V 0.015U	1	
C4006	ECFA16M33	E.CAPACITOR 16V 33U	1	
C4007	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C4008	ECUM1H681JCN	C.CAPACITOR 50V 680P	1	
C4010	ECUM1H6832FN	C.CAPACITOR CH 50V 0.068U	1	
C4034	ECFA1HKA010	E.CAPACITOR 50V 1U	1	
C4503	ECUX1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C4504,05	ECFA1CU470	E.CAPACITOR 16V 47U	2	
C4506	ECFA1CU100	E.CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P.CAPACITOR 50V 0.022U	1	
C4508	ECFA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4509	ECFA1AU470	E.CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4512	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513	ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515	ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522	ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530	ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533	ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539	ECUM1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551	ECQB1H223JA	P.CAPACITOR CH 50V 0.022U	1	
C4556	ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558	ECEA1EK94R7	E.CAPACITOR 25V 4.7U	1	
C4559	ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P.CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P.CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563	ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564	ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565	ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567	ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572	ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585, 86	ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594, 95	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596	ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604	ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4611	ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4616	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4617	ECEA1OM22	E.CAPACITOR 10V 22U	1	
C4618	ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4621	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H123JZ	E.CAPACITOR 50V 0.012U	1	
C4636	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638	ECQB1H272JZ	P.CAPACITOR 50V 2700P	1	
C4652, 53	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C6001	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003	ECEA1HQA2R2	E.CAPACITOR 50V 2.2U	1	
C6004	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C6005	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6006	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6007, 08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C6009	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6010	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C6011	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6012	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6013	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6014	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6015, 16	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6017	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6019	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6025-28	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7005	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C7006	ECEA1AGN100	E.CAPACITOR 10V 10U	1	
C7007	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7010	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7011	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7012	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7302	ECEA1CKN100	E.CAPACITOR 16V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7303	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152KZ	F.CAPACITOR 50V 1500P	1	
C7310	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7311	ECEA1HGR47	E.CAPACITOR 50V 0.47U	1	
C7312	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320, 21	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323, 24	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7332, 33	ECUX1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C7334	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C7339	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7340	ECUM1H390JFN	C.CAPACITOR CH 50V 39P	1	
C7341	ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7343	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7346	ECUM1H390JFN	C.CAPACITOR CH 50V 39P	1	
C7347	ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349, 50	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C7351, 52	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7354	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C7355	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7356	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7357	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7661	ECUM1H104KBN	C.CAPACITOR CH 50V 0.1U	1	
C7662	ECUM1H683KBN	C.CAPACITOR CH 50V 0.068U	1	
C7663	ECUM1H823KBN	C.CAPACITOR CH 50V 0.082U	1	
C7664	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C7665, 66	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667	ECEA1HQA100	E.CAPACITOR 50V 10U	1	
C7670, 71	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7673	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7675	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676, 77	ECUX1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7679	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7681	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C8001	ECUM1C474ZFN	C.CAPACITOR 16V 0.47U	1	
C8002-04	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C8006	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8007	ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C8008	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C8009	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8010-12	ECEA1AKS330	E.CAPACITOR 10V 33U	3	
C8013	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8014	ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C8015	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8019	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C8020	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
D302	1SS283	DIODE	1	
D303	MA151A	DIODE	1	
D304	1SS254	DIODE	1	
D701-07	MA77	DIODE	7	
D708	MA3100L	DIODE	1	
D709	MA77	DIODE	1	
D771	MA141WK	DIODE	1	
D772, 73	MA141K	DIODE	2	
D801, 02	1SS254	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D804	1SS254	DIODE	1	
D2001	1SS254	DIODE	1	
D2002	MA153	DIODE	1	
D2003,04	1SS254	DIODE	2	
D2007,08	1SS254	DIODE	2	
D2009	MA151WK	DIODE	1	
D2010	MA151K	DIODE	1	
D3001	MA151K	DIODE	1	
D3002,03	1SS254	DIODE	2	
D4001	MA151K	DIODE	1	
D4003	MA151WK	DIODE	1	
D4004	MA723VT	DIODE	1	
D4005	MA151K	DIODE	1	
D4501-04	MA141K	DIODE	4	
D6001	1SS254	DIODE	1	
D6002	MA151K	DIODE	1	
D6003	1SS254	DIODE	1	
D6005,06	1SS254	DIODE	2	
D6007	MA4075-L	DIODE	1	
D7002	MA723VT	DIODE	1	
D7003	1SS254	DIODE	1	
D7004-06	11ES1	DIODE	3	
D7007	1SS254	DIODE	1	
D7304	MA3100L	DIODE	1	
D7601	MA141K	DIODE	1	
D7602	MA3082M	DIODE	1	
DL801	VLD0198	DELAY LINE	1	
FE	WJS1141	CONNECTOR (FEMALE)	1	
FL8001	ELB4N055	FILTER	1	
FL8002	ELB4L149	FILTER	1	
IC301	VEFH29D	IC	1	
IC701	LA7577	IC	1	
IC702	LA7975	IC	1	
IC801	NJM2233INA	IC	1	
IC802	M52352FP	IC	1	
IC2001	XRA6887-V3	IC	1	
IC2002	BA6871	IC	1	
IC2004	LM358FS	IC	1	
IC3001	NJM2233BL	IC	1	
IC3002	BA7004	IC	1	
IC4501	XLH7773KS	IC	1	
IC4601	BA7755AF	IC	1	
IC6001	MN67434VRSR	IC	1	
IC7301	TDA3803A	IC	1	
IC7302	TA8721SN	IC	1	
IC7303	TC4W66F	IC	1	
IC7652	AN5043SC	IC	1	
IC8001	BA7049FS	IC	1	
J3901,02	VJJO348	JACK	2	
L303	ELESQ220KA	COIL 22UH	1	
L304	ELESQ101KA	COIL 100UH	1	
L305	ELESQ121JA	COIL	1	
L306	ELESQ390KA	COIL 39UH	1	
L701	ELESQ680KA	COIL 68UH	1	
L711	ELJNAR39KF	COIL	1	
L712-16	ELJFA151KB	COIL 150UH	5	
L718	ELJNAR1RQJF	COIL H	1	
L719	ELESQ5R6KA	COIL 5.6UH	1	
L721	ELJFA151KB	COIL 150UH	1	
L723	ELJFA151HB	COIL 150UH	1	
L724	ELJNAR27KF	COIL	1	
L751	ELJFA100KB	COIL	1	
L752	ELESQ270KA	COIL 27UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L770	ELESQ680KA	COIL 68UH	1	
L803	ELESQ5R6KA	COIL 5.6UH	1	
L804	ELESQ101KA	COIL 100UH	1	
L805	ELESQ270KA	COIL 27UH	1	
L807,08	VLQ054QJ150	COIL 15UH	2	
L809	ELESQ101KA	COIL 100UH	1	
L811,12	ELESQ101KA	COIL 100UH	2	
L2001	VLP0074	COIL	1	
L2002	ELESE102KA	COIL 1000UH	1	
L2003,04	VLQ0599J680	COIL	2	
L2005	VLP0083	COIL	1	
L2006	VLQ0599J680	COIL	1	
L3001	VLQ0599J680	COIL	1	
L3002	VLQ0599J151	COIL 150UH	1	
L3003	VLQ0599J820	COIL H	1	
L3005	VLQ0599J680	COIL	1	
L3006	VLQ0599J101	COIL 100UH	1	
L3007,08	VLQ0599J680	COIL	2	
L3009	VLQ0599J120	COIL H	1	
L3010	VLQ0599J680	COIL H	1	
L3011	VLQ0599J680	COIL	1	
L3012	VLQ0599J270	COIL 27UH	1	
L3013	VLQ0599J680	COIL	1	
LA001,02	ERJ6GM20R00	M.RESISTOR 1/10W 0	2	
LA501,02	ELESE101KA	COIL 100UH	2	
LA601	VLQEL07F153J	COIL 15MH	1	
LA601	VLP0074	COIL	1	
LA605	VLQ0599J331	COIL H	1	
L7003	VLQ0599J1R0	COIL 1UH	1	
L7004	VLQ0599J680	COIL	1	
L7005	VLQ0599J1R0	COIL 1UH	1	
L7006	VLQ0599J680	COIL	1	
L7008	VLQ0599J1R0	COIL 1UH	1	
L7301	ELESQ102KA	COIL 1000UH	1	
L8002	ELESQ101KA	COIL 100UH	1	
L8003	ELESQ221KA	COIL 220UH	1	
L8004	VLQ0188J470	COIL 47UH	1	
P1001	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P2001	VJP1232T	CONNECTOR (MALE) 5P	1	
P2001	VJS1738T	CONNECTOR (FEMALE)	1	
P2002	VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3502	CONNECTOR (MALE)	1	
P2503	VJS3482	CONNECTOR (FEMALE)	1	
P2902	VJS1738T	CONNECTOR (FEMALE)	1	
P3001	VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P4001	VJS2331	CONNECTOR (FEMALE)	1	
P4002	VJP1230T	CONNECTOR (MALE) 3P	1	
P4002	VJS1230T	CONNECTOR (FEMALE)	1	
P6001	VJS3537A025G	CONNECTOR (FEMALE) 25P	1	
P6002	VJS3537A012G	CONNECTOR (FEMALE) 12P	1	
P6003	VJP1242T	CONNECTOR (MALE) 2P	1	
P6004	VJS3537A013G	CONNECTOR (FEMALE) 13P	1	
P7301	VJP1237R	CONNECTOR (MALE) 10P	1	
P7301	VJS1237R	CONNECTOR (FEMALE)	1	
P7302	VJP1237T	CONNECTOR (MALE) 10P	1	
P7302	VJS1237T	CONNECTOR (FEMALE)	1	
P7901	VJS1237R	CONNECTOR (FEMALE)	1	
P7902	VJS1237T	CONNECTOR (FEMALE)	1	
PK4001-03	VJR0757B018T	CONNECTOR	3	
PK7301,02	VJP3042A010W	CONNECTOR (MALE) 10P	2	
PP801	VJP3043A005W	CONNECTOR (MALE) 5P	1	
PP802	VJP3043A003W	CONNECTOR (MALE) 3P	1	
PP803	VJP3043A007W	CONNECTOR (MALE) 7P	1	
PP3001	VJP3044G009W	CONNECTOR (MALE) 9P	1	
PP3002	VJP3044G012W	CONNECTOR (MALE) 12P	1	
PP3003	VJP3044G006W	CONNECTOR (MALE) 6P	1	
PP7001	VJP3043A007W	CONNECTOR (MALE) 7P	1	
PP7002-04	VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7005	VJP3043A006W	CONNECTOR (MALE) 6P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R820,21	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R822	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R823,24	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R827	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R828	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R829	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R830	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R831	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	
R832	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R833	ERJ6GMYJ204	M.RESISTOR CH 1/10W 200K	1	
R834	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R835	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R836	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R848	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R849	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R850	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R853	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R855	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R857	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R858	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R859	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1001	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2001	ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002	ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003	ERXLSJ1R8	M.RESISTOR 1W 1.8	1	
R2004-06	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R2007,08	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R2009	ERX12SJR47	M.RESISTOR 1/12W 0.47U	1	
R2010	ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2011,12	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	2	
R2013	ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R2014	ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2015,16	ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2017	ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2018	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2020	ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2021	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2022	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2023	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2024	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2025	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2026	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2027,28	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2031	ERJ6GMYJ244	M.RESISTOR CH 1/10W 220K	1	
R2032	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2034	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2035	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2036,37	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2040	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2041	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2045	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2046	ERJ6GMYG273	M.RESISTOR CH 1/10W 27K	1	
R2047	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
R2048	ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2050	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2051	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2053,54	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R2055	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R2056,57	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R2060	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R3001	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3002	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3003	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3004	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3007	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008	ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3009	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3011	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3012,13	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3014	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3015,16	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R3017	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3018	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3019,20	ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R3021	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3024	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3025	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3026,27	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R3028	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3029	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R3030	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3032	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R3033	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3035,36	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3906	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3907	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3909	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3912	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3913	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3914	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3915	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
R3917	ERJ6GMYZ000	M.RESISTOR 1/10W 0	1	
R3919	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3920	ERJ6GMYZ000	M.RESISTOR 1/10W 0	1	
R4001	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4002	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R4003	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4004	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R4005	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R4006	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R4007	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4008	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
R4009	ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R4010,11	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	2	
R4014	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4501,02	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR CH 1/10W	1	
R4506,07	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509	VRE0071E622	M.RESISTOR CH 1/10W	1	
R4511	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4513	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4514	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R4518,19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4522	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527	VRE0071E333	M.RESISTOR CH 1/10W	1	
R4528	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4529	ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4542	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553,54	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562	VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R4563	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568,69	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
VR751	EVNCRBA00B53	V.RESISTOR	1	
VR803	EVNCRBA00B14	V.RESISTOR	1	
VR2001	EVNDKAA00B54	V.RESISTOR 50K	1	
VR2006	EVNDKAA00B15	V.RESISTOR 100K	1	
VR2011	EVNDKAA00B15	V.RESISTOR 100K	1	
VR3001	EVNDKAA00B23	V.RESISTOR 5K	1	
VR3012,13	EVNDKAA00B52	V.RESISTOR 500	2	
VR4001	EVNDKAA00B25	V.RESISTOR 200K	1	
VR4501	EVMECSA00B53	V.RESISTOR	1	
VR4502	EVMECSA00B54	V.RESISTOR	1	
VR4507	EVMECSA00B54	V.RESISTOR	1	
VR4509	EVMECSA00B53	V.RESISTOR	1	
VR4550	EVMECSA00B53	V.RESISTOR	1	
VR4551,52	EVMECSA00B55	V.RESISTOR	2	
VR7301	EVTEASA00B14	V.RESISTOR	1	
VR7326	EVTEASA00B52	V.RESISTOR	1	
VR7328	EVTEASA00B52	V.RESISTOR	1	
VR7340	EVNCRBA00B14	V.RESISTOR	1	
VR7342	EVNCRBA00B14	V.RESISTOR	1	
VR7344	EVNCRBA00B14	V.RESISTOR	1	
VR8001	EVNDKAA00B23	V.RESISTOR 5K	1	
X710	EFCH38MWV3	CRYSTAL OSCILLATOR	1	
X711	EFCS3F02W3B	CRYSTAL OSCILLATOR	1	
X712	EFCS6ROMS5	CRYSTAL OSCILLATOR	1	
X714	VSK0553	CRYSTAL OSCILLATOR	1	
X715	VSK0547	CRYSTAL OSCILLATOR	1	
X716	EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X717	EFCS5744BF	CRYSTAL OSCILLATOR	1	
X718	EFCH32MWP1	CRYSTAL OSCILLATOR	1	
X719	EFCS4504BFB	CRYSTAL OSCILLATOR	1	
X720	EFCS6004BF	CRYSTAL OSCILLATOR	1	
X801	VSK0162	CRYSTAL OSCILLATOR	1	
X3001	VSK0099	CRYSTAL OSCILLATOR	1	
X6001	VSK0609	CRYSTAL OSCILLATOR	1	
X7301,02	EFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04	EFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305	ELB5A016	CRYSTAL OSCILLATOR	1	
X8001	VSK0473	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	ENC17992A	RF CONVERTER	1 <1>	
	VJH0756	I/O JACK PLATE	1	
	VEEB474	WIRE CABLE	1 (P2001-P2902)	
	VEEB564	WIRE CABLE	1 (P2003-POWER TR.)	
	VEEB969	WIRE CABLE	1 (P4002-PE HEAD)	
	VWJ25C9200BB	FLAT CARD CABLE	1 (P6001-P7501)	
	VWJ12C9200BB	FLAT CARD CABLE	1 (P6002-P7502)	
	VWJ0745	FLAT CARD CABLE	1 (P3001-P501)	
	VWJ0746	FLAT CARD CABLE	1 (P6004-P1505)	
	VWJ0825	FLAT CARD CABLE	1 (P2002-CAPSTAN)	
	VWJ0826B	FLAT CARD CABLE	1 (P1001-P1102)	
	WJF1031	CLAMPER	1	
	ENV598B1H3	TUNER	1 <1> FOR TV DEMODU.	
	VSC4025	SHIELD COVER (MAIN)	1 FOR TV DEMODULATOR	
	VSC3815	SHIELD COVER (TOP)	1 FOR TV DEMODULATOR	
	VEEB559	WIRE CABLE	1 FOR DECODER (P7901-P7301)	
	VEEB560	WIRE CABLE	1 FOR DECODER (P7902-P7302)	
	VEP03A88H	MAIN C.B.A.		(RTL)NV-HD90EE
C305	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C306,07	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C308	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C309	ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C310	ECEA1CK220	E.CAPACITOR 16V 22U	1	
C311	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C312	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C313,14	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C315	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C319	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C320	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C701	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C703	ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C705	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C706	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C708	ECEA1CK330	E.CAPACITOR 16V 33U	1	
C709	ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C710	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C715-20	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	6	
C721	ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C723	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C725	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C728	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C730	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731	ECEA1CK5100	E.CAPACITOR 16V 10U	1	
C734	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C739	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C741	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742	ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C744	ECEA1HKR7	E.CAPACITOR 50V 0.47U	1	
C745	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C746	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C781	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C782	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C797-99	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C801	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C802	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C803,04	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C805	ECEA0JK221	E.CAPACITOR 6.3V 220	1	
C806	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C807	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C808	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C809	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C812	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C814	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C815	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C816	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C817	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C818	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C819	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C820-25	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	6	
C826	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C827	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C828	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C829	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C830	ECEA1HKR1	E.CAPACITOR 50V 0.1U	1	
C831	ECQB1H332JH	P.CAPACITOR 50V 0.27U	1	
C832	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C838	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C839	ECUM1H100JCN	C.CAPACITOR CH 50V 10P	1	
C841	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C842	ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C843	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C845	ECEA1HK010	E.CAPACITOR 50V 1U	1	
C846	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C849	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C881	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C882	ECEA1CK330	E.CAPACITOR 16V 33U	1	
C883	ECEA1AK470	E.CAPACITOR 10V 47U	1	
C884	ECQV1H563JM	P.CAPACITOR 50V 0.056U	1	
C885	ECEA1CK330	E.CAPACITOR 16V 33U	1	
C886	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C887	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
C888	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C1001	ECA1EM101	E.CAPACITOR 25V 100U	1	
C1002	ECEA1AFS221	E.CAPACITOR 10V 220U	1	
C1003	ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1004	ECEA1GA330	E. CAPACITOR 16V 33U	1	
C1005	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C1006	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2001	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C2002	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2003	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C2004	ECEA1KA101	E. CAPACITOR 16V 100U	1	
C2005, 06	ECEA1HKM47	E. CAPACITOR 50V 0.47U	2	
C2007	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2008	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C2009, 10	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	2	
C2011, 12	ECUM1H333KBN	C. CAPACITOR CH 50V 0.033U	2	
C2013	ECQV1H334JM	P. CAPACITOR 50V 0.33U	1	
C2014	ECUM1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C2015, 16	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	2	
C2017	ECEA1HKA2R2	E. CAPACITOR 50V 0.22U	1	
C2018, 19	ECUM1H333KBN	C. CAPACITOR CH 50V 0.033U	2	
C2020	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2021	BCAOJM221	E. CAPACITOR 6.3V 220U	1	
C2022	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C2023	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C2024	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C2025, 26	ECUM1C1052FN	C. CAPACITOR CH 16V 1U	2	
C2027	ECEA1HKA3R3	E. CAPACITOR 50V 3.3U	1	
C2028	ECEA1HKA3R3	E. CAPACITOR 50V 3.3U	1	
C2029	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C2030	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2031	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2032	ECUM1H223KBN	C. CAPACITOR CH 50V 0.022U	1	
C2033	BCAOJM221	E. CAPACITOR 6.3V 220U	1	
C2034	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C2035	ECEA1HKA3R3	E. CAPACITOR 50V 3.3U	1	
C2036	ECEA0JKA220	E. CAPACITOR 6.3V 22U	1	
C2037	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C2038	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C2039	ECEA1HKA4R7	E. CAPACITOR 50V 4.7U	1	
C2040	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2041	ECUM1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C2042	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2043	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C2044	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C2045	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C2046	ECEA1HKA4R7	E. CAPACITOR 50V 0.47U	1	
C2047	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2048	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C2049	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2050	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2051	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C2052	BCAOJM101	E. CAPACITOR 6.3V 100P	1	
C3001	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3002, 03	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	2	
C3004	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3005	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C3006	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C3008	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C3009	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3010	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3011	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3012	ECUM1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3013	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3014	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C3015	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3016	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3017	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3019	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3021	BCAOJM471	E. CAPACITOR 6.3V 47U	1	
C3022	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3023	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3024	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C3025	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3026, 27	ECEA1KA100	E. CAPACITOR 16V 10U	2	
C3028, 29	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	2	
C3030	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C3031	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3032	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3033	ECUM1H681JCN	C. CAPACITOR 50V 680P	1	
C3034	ECUM1H1042FN	C. CAPACITOR CH 50V 0.1U	1	
C3035	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3036	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3037	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C3038	ECEA1AFS221	E. CAPACITOR 10V 220U	1	
C3905, 06	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	2	
C3907, 08	VCEA1CAD100	CAPACITOR	2	
C3911	ECEA1KA100	E. CAPACITOR 16V 10U	1	
C3914, 15	ECUM1C1052FN	C. CAPACITOR CH 16V 1U	2	
C4001	ECUM1H1032FN	C. CAPACITOR CH 50V 0.01U	1	
C4002	ECQD2H31KB	C. CAPACITOR 500V 330P	1	
C4003	ECQF1322JZ	P. CAPACITOR 50V 3300P	1	
C4004	ECQB1H102JZ	F. CAPACITOR 50V 1000P	1	
C4005	ECQB1H153JZ	F. CAPACITOR 50V 0.015U	1	
C4006	ECEA16M33	E. CAPACITOR 16V 33U	1	
C4007	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4008	ECUM1H681JCN	C. CAPACITOR 50V 680P	1	
C4009	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4010	ECUM1H6832FN	C. CAPACITOR CH 50V 0.068U	1	
C4011	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C4034	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C4503	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C4504, 05	ECEA1CU470	E. CAPACITOR 16V 47U	2	
C4506	ECEA1CU100	E. CAPACITOR 16V 10U	1	
C4507	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1	
C4508	ECEA1EKN4R7	E. CAPACITOR 25V 4.7U	1	
C4509	ECEA1AU470	E. CAPACITOR 10V 47U	1	
C4510	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JA	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUX1H681JV	C. CAPACITOR CH 50V 680P	1	
C4514	ECUX1H561JV	C. CAPACITOR CH 50V 560P	1	
C4515	ECEA1EU4R7	E. CAPACITOR 25V 4.7U	1	
C4517	ECEA1AU101	E. CAPACITOR 10V 100U	1	
C4518	ECUX1C1042FV	C. CAPACITOR CH 16V 0.1U	1	
C4521	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C4522	ECEA1HU3R3	E. CAPACITOR 50V 3.3U	1	
C4524	ECEA1AU101	E. CAPACITOR 10V 100U	1	
C4528	ECUX1C1042FV	C. CAPACITOR CH 16V 0.1U	1	
C4530	ECEA0JU470	E. CAPACITOR 6.3V 47U	1	
C4533	ECEA1AU330	E. CAPACITOR 10V 33U	1	
C4537	ECUX1H102JCV	C. CAPACITOR CH 50V 1000P	1	
C4538	ECEA1HUR47	E. CAPACITOR 50V 0.47U	1	
C4539	ECUM1C2242FV	C. CAPACITOR CH 16V 0.22U	1	
C4541	ECUX1C1042FV	C. CAPACITOR CH 16V 0.1U	1	
C4545	ECUX1H102JCV	C. CAPACITOR CH 50V 1000P	1	
C4551	ECQB1H223JA	P. CAPACITOR 50V 0.022U	1	
C4556	ECEA1CU100	E. CAPACITOR 16V 10U	1	
C4558	ECEA1EKN4R7	E. CAPACITOR 25V 4.7U	1	
C4559	ECEA1AU470	E. CAPACITOR 10V 47U	1	
C4560	ECQB1H103JA	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JA	P. CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JV	C. CAPACITOR CH 50V 560P	1	
C4563	ECUX1H681JV	C. CAPACITOR CH 50V 680P	1	
C4564	ECUX1H561JV	C. CAPACITOR CH 50V 560P	1	
C4565	ECEA1EU4R7	E. CAPACITOR 25V 4.7U	1	
C4567	ECEA1AU101	E. CAPACITOR 10V 100U	1	
C4568	ECUX1C1042FV	C. CAPACITOR CH 16V 0.1U	1	
C4572	ECEA1HU3R3	E. CAPACITOR 50V 3.3U	1	
C4576	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C4583	ECEA1AU330	E. CAPACITOR 10V 33U	1	
C4585, 86	ECEA1AU101	E. CAPACITOR 10V 100U	2	
C4591	ECUX1C1042FV	C. CAPACITOR CH 16V 0.1U	1	
C4592	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C4593	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C4594, 95	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C4596	ECEA1CU100	E. CAPACITOR 16V 10U	1	
C4597	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C4604	ECUM1H182JN	C. CAPACITOR CH 50V 1800P	1	
C4606	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C4616	ECUX1H102JCV	C. CAPACITOR CH 50V 1000P	1	
C4617	ECEA10M22	E. CAPACITOR 10V 22U	1	
C4618	ECQB1H822JZ	F. CAPACITOR 50V 8200P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4621	ECFA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629	ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4636	ECUM1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4638	ECQB1H822JZ	P.CAPACITOR 50V 8200P	1	
C4652, 53	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C6001	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6003	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C6004	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C6005	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6006	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6007, 08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C6009	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6010	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C6011	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6012	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6013	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6014	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C6015, 16	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6017	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6019	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C6025-28	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7005	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C7006	ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C7010	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7012	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7302	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305	ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307	ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308	ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309	ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C7310	ECEA16M10	E.CAPACITOR 16V	1	
C7311	ECEA50MR47	E.CAPACITOR 50V 0.47U	1	
C7312	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7313	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7315	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7316	ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7317	ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320, 21	ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323, 24	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331	ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7332, 33	ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	2	
C7334	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7335	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C7339	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7341	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7342	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7343	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7347	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7348	ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349, 50	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7351, 52	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7354	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7355	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7356, 57	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7358	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7359	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C7651	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7653	ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C7654	ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C7655, 56	ECEA1HK010	E.CAPACITOR 50V 1U	2	
C7657	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7658	ECQV1562JZ	P.CAPACITOR 100V 5600P	1	
C7659	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7661	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7662	ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7663	ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7664	ECQB1H273JH	P.CAPACITOR 50V 0.027U	1	
C7665, 66	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670, 71	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7673	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7675	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676, 77	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7678	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7679	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7680	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7681	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
D302	1SS283	DIODE	1	
D303	MA151A	DIODE	1	
D304	1SS254	DIODE	1	
D710	MA3100L	DIODE	1	
D773	MA151K	DIODE	1	
D801, 02	1SS254	DIODE	2	
D804	1SS254	DIODE	1	
D2001	1SS254	DIODE	1	
D2002	MA153	DIODE	1	
D2003, 04	1SS254	DIODE	2	
D2007, 08	1SS254	DIODE	2	
D2009	MA151WK	DIODE	1	
D2010	MA151K	DIODE	1	
D3001	MA151K	DIODE	1	
D3003	1SS254	DIODE	1	
D3901	1SS254	DIODE	1	
D4001	MA151K	DIODE	1	
D4003	MA151WK	DIODE	1	
D4005	MA151K	DIODE	1	
D4501-04	MA141K	DIODE	4	
D6001	1SS254	DIODE	1	
D6002	MA151K	DIODE	1	
D6003	1SS254	DIODE	1	
D6005, 06	1SS254	DIODE	2	
D6007	MA4075-L	DIODE	1	
D7002	MA723VT	DIODE	1	
D7004-06	11ES1	DIODE	3	
D7007	1SS254	DIODE	1	
D7303	MA28WA	DIODE	1	
D7304	MA3100L	DIODE	1	
D7601	MA151A	DIODE	1	
D7602	MA3082M	DIODE	1	
DL801	VLDO198	DELAY	1	
DL802	EFDM124A13N	DELAY	1	
FE	VJS1141	CONNECTOR (FEMALE)	1	
FL881	VLFO143	FILTER	1	
IC301	VEFH29D	IC	1	
IC701	M51366SP	IC	1	
IC802	M52352FP	IC	1	
IC881	BA7025L	IC	1	
IC2001	XRA6887-V3	IC	1	
IC2002	BA6871	IC	1	
IC2004	LM358PS	IC	1	
IC3001	NJM2233BL	IC	1	
IC3002	BA7004	IC	1	
IC4002	NJM4558M	IC	1	
IC4501	XLH7773KS	IC	1	
IC4601	BA7755AF	IC	1	
IC6001	MN67434VRSR	IC	1	
IC7301	TDA3803A	IC	1	
IC7302	TA8721SN	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC7303	LA7975	IC	1	
IC7651	AN5421N	IC	1	
IC7652	AN5043	IC	1	
IC7653	MN4066BS	IC	1	
J3901	VJ30348	JACK	1	
J3903	VJS3539	JACK	1	
L303	ELESQ220KA	COIL 22UH	1	
L304	ELESQ101KA	COIL 100UH	1	
L305	ELESQ121JA	COIL	1	
L306	ELESQ390KA	COIL 39UH	1	
L701,02	ELESQ680KA	COIL 68UH	2	
L711	ELQT1R2KB	COIL 1.2UH	1	
L713	VLQ0305JR82	COIL 0.82UH	1	
L714	VLQ0305J1R2	COIL 1.2UH	1	
L715	VLQ0213K680	COIL 68UH	1	
L717,18	ELESQ680KA	COIL 68UH	2	
L719	ELESQ5R6KA	COIL 5.6UH	1	
L720	ELESQ680KA	COIL 68UH	1	
L781	ELESQ680KA	COIL 68UH	1	
L801,02	VLQ0540K150	COIL H	2	
L803	ELESQ5R6KA	COIL 5.6UH	1	
L804	ELESQ101KA	COIL 100UH	1	
L805	ELESQ270KA	COIL 27UH	1	
L807,08	VLQ0540J150	COIL 15UH	2	
L809	ELESQ101KA	COIL 100UH	1	
L811,12	ELESQ101KA	COIL 100UH	2	
L881	ELESE101KA	COIL 100UH	1	
L2001	VLPO074	COIL	1	
L2002	ELESE102KA	COIL 1000UH	1	
L2003,04	VLQ0599J680	COIL	2	
L2005	VLPO083	COIL	1	
L2006	VLQ0599J680	COIL	1	
L3001	VLQ0599J680	COIL	1	
L3002	VLQ0599J151	COIL 150UH	1	
L3003	VLQ0599J820	COIL H	1	
L3005	VLQ0599J680	COIL	1	
L3006	VLQ0599J101	COIL 100UH	1	
L3007	VLQ0599J680	COIL	1	
L3009	VLQ0599J120	COIL H	1	
L3010	VLQ0599J6R8	COIL H	1	
L3011	VLQ0599J680	COIL	1	
L3012	VLQ0599J270	COIL 27UH	1	
L3013	VLQ0599J680	COIL	1	
L4001,02	ERJ6GEZOR00	M.RESISTOR 1/10W 0	2	
L4501,02	ELESE101KA	COIL 100UH	2	
L4601	VLQEL07F153J	COIL 15MH	1	
L6001	VLPO074	COIL	1	
L6005	VLQ0599J331	COIL H	1	
L7003	VLQ0599J1R0	COIL 1UH	1	
L7004	VLQ0599J680	COIL	1	
L7005	VLQ0599J1R0	COIL 1UH	1	
L7006	VLQ0599J680	COIL	1	
L7301	ELESQ102KA	COIL 1000UH	1	
L7302	ELESQ100KA	COIL 10UH	1	
P1001	VJS3537A010G	CONNECTOR (FEMALE) 10P	1	
P2001	VJP1232T	CONNECTOR (MALE) 5P	1	
P2001	VJS1738T	CONNECTOR (FEMALE)	1	
P2002	VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3502	CONNECTOR (MALE)	1	
P2503	VJS3482	CONNECTOR (FEMALE)	1	
P2902	VJS1738T	CONNECTOR (FEMALE)	1	
P3001	VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P4001	VJS2331	CONNECTOR (FEMALE)	1	
P4002	VJP1230T	CONNECTOR (MALE) 3P	1	
P4002	VJS1230T	CONNECTOR (FEMALE)	1	
P6001	VJS3537A025G	CONNECTOR (FEMALE) 25P	1	
P6002	VJS3537A012G	CONNECTOR (FEMALE) 12P	1	
P6003	VJP1242T	CONNECTOR (MALE) 2P	1	
P6004	VJS3537A013G	CONNECTOR (FEMALE) 13P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
PK081	VJR0456	PACK PIN	1	
PK4001-03	VJR0757B018T	CONNECTOR	3	
PP3001	VJP3044G009W	CONNECTOR (MALE) 9P	1	
PP3002	VJP3044G012W	CONNECTOR (MALE) 12P	1	
PP3003	VJP3044G006W	CONNECTOR (MALE) 6P	1	
PP7001	VJP3043A006W	CONNECTOR (MALE) 6P	1	
PP7002-04	VJP3043A005W	CONNECTOR (MALE) 5P	3	
PP7005	VJP3043A004W	CONNECTOR (MALE) 4P	1	
PP7006	VJP3043A010W	CONNECTOR (MALE) 10P	1	
PS301	VJS3044F009W	CONNECTOR (FEMALE) 9P	1	
PS302	VJS3044F012W	CONNECTOR (FEMALE) 12P	1	
PS303	VJS3044F006W	CONNECTOR (FEMALE) 6P	1	
PS701-03	VJS3043B005W	CONNECTOR (FEMALE) 5P	3	
PS704	VJS3043B006W	CONNECTOR (FEMALE) 6P	1	
PS7301,02	VJR0477	PACK PIN	2	
Q703	MSD601-S	TRANSISTOR	1	
Q710	2SC1047	TRANSISTOR	1	
Q712	2SC1317	TRANSISTOR	1	
Q771,72	MSD601-S	TRANSISTOR	2	
Q801	MSC2295	TRANSISTOR	1	
Q802	MSD601	TRANSISTOR	1	
Q808	MSB709	TRANSISTOR	1	
Q1001	MSD1328	TRANSISTOR	1	
Q3001,02	MSD601-R	TRANSISTOR	2	
Q3003	MSB709-R	TRANSISTOR	1	
Q3004,05	MSD601-R	TRANSISTOR	2	
Q3006	MSC2295	TRANSISTOR	1	
Q3007	MSB709-R	TRANSISTOR	1	
Q3008	MSC2295	TRANSISTOR	1	
Q3010	2SB709	TRANSISTOR	1	
Q3011	2SB1321-R	TRANSISTOR	1	
Q4002	2SD602A-R	TRANSISTOR	1	
Q4003	MSD601	TRANSISTOR	1	
Q4501	2SD655	TRANSISTOR	1	
Q4551	2SB561	TRANSISTOR	1	
Q4552	2SD1819A	TRANSISTOR	1	
Q6001	2SD1991A	TRANSISTOR	1	
Q6002	MSB709-R	TRANSISTOR	1	
Q6004,05	2SB1321-R	TRANSISTOR	2	
Q7301	MSD601-S	TRANSISTOR	1	
Q7304,05	MSD601	TRANSISTOR	2	
Q7306	2SC2404-C	TRANSISTOR	1	
Q7307	2SD1328-S	TRANSISTOR	1	
QR303	MRN2404	TRANSISTOR-RESISTOR	1	
QR306	MRN1404	TRANSISTOR-RESISTOR	1	
QR701,02	MRN1404	TRANSISTOR-RESISTOR	2	
QR711,12	MRN1403	TRANSISTOR-RESISTOR	2	
QR713	MRN1402	TRANSISTOR-RESISTOR	1	
QR804	MRN2404	TRANSISTOR-RESISTOR	1	
QR805	MRN1404	TRANSISTOR-RESISTOR	1	
QR2001	UN2113T	TRANSISTOR-RESISTOR	1	
QR2002	UN2114	TRANSISTOR-RESISTOR	1	
QR2003	XN1213	TRANSISTOR-TRANSISTOR	1	
QR2004	UN2112T	TRANSISTOR-RESISTOR	1	
QR3001	UN2111T	TRANSISTOR-RESISTOR	1	
QR3002,03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3006	UN2213T	TRANSISTOR-RESISTOR	1	
QR4001,02	UN2213T	TRANSISTOR-RESISTOR	2	
QR4508,09	UN5113	TRANSISTOR-RESISTOR	1	
QR4510	UN5212	TRANSISTOR-RESISTOR	1	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6003	UN2211T	TRANSISTOR-RESISTOR	1	
QR6004	UN2212T	TRANSISTOR-RESISTOR	1	
QR7301,02	MRN1404	TRANSISTOR-RESISTOR	2	
QR7312-14	MRN1402	TRANSISTOR-RESISTOR	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR7315,16	MRN1404	TRANSISTOR-RESISTOR	2	
QR7317	MRN1213	TRANSISTOR-TRANSISTOR	1	
QR7601	MRN1404	TRANSISTOR-RESISTOR	1	
R304	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R307	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R308	ERJ6GMXJ472	M.RESISTOR CH 1/10W 4.7K	1	
R310	ERJ6GMXJ272	M.RESISTOR CH 1/10W 2.7K	1	
R312	ERJ6GMXJ473	M.RESISTOR CH 1/10W 47K	1	
R315	ERJ6GMXJ393	M.RESISTOR CH 1/10W 39K	1	
R316	ERJ6GMXJ392	M.RESISTOR CH 1/10W 3.9K	1	
R318,19	ERJ6GMXJ103	M.RESISTOR CH 1/10W 10K	2	
R322	ERJ6GMXJ332	M.RESISTOR CH 1/10W 3.3K	1	
R327	ERJ6GEYJ125	M.RESISTOR CH 1/10W 1.2M	1	
R712	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R713	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R714	ERD2FCG330	C.RESISTOR 2W 33	1	<1>
R715	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R716	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R717	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R718	ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	1	
R719	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R720	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R721,22	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R723	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R724	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R725	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R726	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R727	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R728	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R737	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R738	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R740	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R743	ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R744	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R745	ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R746	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R750	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R751	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R756	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R758	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R772	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R773	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R774	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R781	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R782	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R792	ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R795	ERJ6GEYJ221	M.RESISTOR CH 1/10W 2.2K	1	
R799	ERJ6GEYJ682	M.RESISTOR CH 1/10W 680	1	
R801	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R802,03	ERJ6GMXJ471	M.RESISTOR CH 1/10W 470	2	
R804,05	ERJ6GMXJ103	M.RESISTOR CH 1/10W 10K	2	
R806	ERJ6GMXJ221	M.RESISTOR CH 1/10W 220	1	
R807	ERJ6GMXJ271	M.RESISTOR CH 1/10W 270	1	
R813	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R814	ERJ6GMXJ393	M.RESISTOR CH 1/10W 39K	1	
R815	ERJ6GMXJ821	M.RESISTOR CH 1/10W 820	1	
R816	ERJ6GMXJ471	M.RESISTOR CH 1/10W 470	1	
R817	ERJ6GMXJ182	M.RESISTOR CH 1/10W 1.8K	1	
R818	ERJ6GMXJ681	M.RESISTOR CH 1/10W 680	1	
R819	ERJ6GMXJ272	M.RESISTOR CH 1/10W 2.7K	1	
R820,21	ERJ6GMXJ122	M.RESISTOR CH 1/10W 1.2K	2	
R823,24	ERJ6GMXJ152	M.RESISTOR CH 1/10W 1.5K	2	
R825	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R827	ERJ6GMXJ122	M.RESISTOR CH 1/10W 1.2K	1	
R828	ERJ6GMXJ271	M.RESISTOR CH 1/10W 270	1	
R829	ERJ6GMXJ122	M.RESISTOR CH 1/10W 1.2K	1	
R830	ERJ6GMXJ271	M.RESISTOR CH 1/10W 270	1	
R831	ERJ6GMXJ681	M.RESISTOR CH 1/10W 680	1	
R832	ERJ6GMXJ154	M.RESISTOR CH 1/10W 150K	1	
R833	ERJ6GMXJ204	M.RESISTOR CH 1/10W 200K	1	
R834	ERJ6GMXJ153	M.RESISTOR CH 1/10W 15K	1	
R835	ERJ6GMXJ103	M.RESISTOR CH 1/10W 10K	1	
R836	ERJ6GMXJ154	M.RESISTOR CH 1/10W 150K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R848	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R849	ERJ6GMXJ473	M.RESISTOR CH 1/10W 47K	1	
R850	ERJ6GMXJ563	M.RESISTOR CH 1/10W 56K	1	
R853	ERJ6GMXJ473	M.RESISTOR CH 1/10W 47K	1	
R855	ERJ6GMXJ152	M.RESISTOR CH 1/10W 1.5K	1	
R856	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R857	ERJ6GMXJ101	M.RESISTOR CH 1/10W 100	1	
R859	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R881	ERJ6GMXJ223	M.RESISTOR CH 1/10W 22K	1	
R882	ERJ6GMXJ390	M.RESISTOR CH 1/10W 39	1	
R883	ERJ6GMXJ154	M.RESISTOR CH 1/10W 150K	1	
R884	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R885	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R886	ERJ6GMXJ103	M.RESISTOR CH 1/10W 10K	1	
R1001	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R2001	ERJ6GMXG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002	ERJ6GMXG913	M.RESISTOR CH 1/10W 91K	1	
R2003	ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2004-06	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	3	
R2007,08	ERJ6GMXJ392	M.RESISTOR CH 1/10W 3.9K	2	
R2009	ERX12SJ47	M.RESISTOR 1/12W 0.47U	1	
R2010	ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2011,12	ERJ6GMXJ105	M.RESISTOR CH 1/10W 1M	2	
R2013	ERDS2TJ601	C.RESISTOR 1/4W 680	1	
R2014	ERJ6GMXG821	M.RESISTOR CH 1/10W 820	1	
R2015,16	ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2017	ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2018	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2019	ERJ6GMXG432	M.RESISTOR CH 1/10W 4.3K	1	
R2020	ERJ6GMXG473	M.RESISTOR CH 1/10W 47K	1	
R2021	ERJ6GMXJ104	M.RESISTOR CH 1/10W 100K	1	
R2022	ERJ6GMXJ683	M.RESISTOR CH 1/10W 68K	1	
R2023	ERJ6GMXJ333	M.RESISTOR CH 1/10W 33K	1	
R2024	ERJ6GMXJ563	M.RESISTOR CH 1/10W 56K	1	
R2025	ERJ6GMXJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2026	ERJ6GMXJ684	M.RESISTOR CH 1/10W 680K	1	
R2027,28	ERJ6GMXJ223	M.RESISTOR CH 1/10W 22K	2	
R2029	ERJ6GMXJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2031	ERJ6GMXJ244	M.RESISTOR CH 1/10W 220K	1	
R2032	ERJ6GMXG103	M.RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GMXG133	M.RESISTOR CH 1/10W 13K	1	
R2034	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R2035	ERJ6GMXJ105	M.RESISTOR CH 1/10W 1M	1	
R2036,37	ERJ6GMXJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GMXJ683	M.RESISTOR CH 1/10W 68K	1	
R2039	ERJ6GMXJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2040	ERJ6GMXJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2041	ERJ6GMXJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43	ERJ6GMXJ223	M.RESISTOR CH 1/10W 22K	2	
R2044	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R2045	ERJ6GMXJ104	M.RESISTOR CH 1/10W 100K	1	
R2046	ERJ6GMXG273	M.RESISTOR CH 1/10W 27K	1	
R2047	ERJ6GMXJ104	M.RESISTOR CH 1/10W 100K	1	
R2048	ERJ6GMXG124	M.RESISTOR CH 1/10W 120K	1	
R2050	ERJ6GMXJ683	M.RESISTOR CH 1/10W 68K	1	
R2051	ERJ6GMXJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2053,54	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	2	
R2055	ERJ6GMXJ471	M.RESISTOR CH 1/10W 470	1	
R2056,57	ERJ6GMXJ822	M.RESISTOR CH 1/10W 8.2K	2	
R2060	ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R3001	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R3002	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3003	ERJ6GMXJ103	M.RESISTOR CH 1/10W 10K	1	
R3004	ERJ6GMXJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GMXJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3007	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008	ERJ6GMXJ681	M.RESISTOR CH 1/10W 680	1	
R3009	ERJ6GMXJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3010	ERJ6GMXJ102	M.RESISTOR CH 1/10W 1K	1	
R3011	ERJ6GMXJ561	M.RESISTOR CH 1/10W 560	1	
R3012,13	ERJ6GMXJ473	M.RESISTOR CH 1/10W 47K	2	
R3014	ERJ6GMXJ223	M.RESISTOR CH 1/10W 22K	1	
R3015,16	ERJ6GMXJ561	M.RESISTOR CH 1/10W 560	2	
R3017	ERJ6GMXJ391	M.RESISTOR CH 1/10W 390	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3018	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	1	
R3019, 20	ERJ6GMVJ821	M.RESISTOR CH 1/10W 820	2	
R3021	ERJ6GMVJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3022	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	1	
R3023	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R3024	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3025	ERJ6GMVJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3026, 27	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	2	
R3028	ERJ6GMVJ471	M.RESISTOR CH 1/10W 470	1	
R3030	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GMVJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3032	ERJ6GMVJ561	M.RESISTOR CH 1/10W 560	1	
R3033	ERJ6GMVJ223	M.RESISTOR CH 1/10W 22K	1	
R3035, 36	ERJ6GMVJ223	M.RESISTOR CH 1/10W 22K	2	
R3037	ERJ6GMVJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3038	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	1	
R3901, 02	ERJ6GMVJ471	M.RESISTOR CH 1/10W 470	2	
R3903, 04	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	2	
R3905, 06	ERJ6GMVJ750	M.RESISTOR CH 1/10W 75	2	
R3908	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R3909	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3912	ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R3913	ERJ6GMVJ391	M.RESISTOR CH 1/10W 390	1	
R3915	ERJ6GMVJ750	M.RESISTOR CH 1/10W 75	1	
R3917	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R3919	ERJ6GMVJ391	M.RESISTOR CH 1/10W 390	1	
R3920	ERJ6GMZOR00	M.RESISTOR 1/10W 0	1	
R3921	ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R3922, 23	ERJ6GMVJ223	M.RESISTOR CH 1/10W 22K	2	
R4001	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4003	ERJ6GMVJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4004	ERJ6GMVJ183	M.RESISTOR CH 1/10W 18K	1	
R4005	ERJ6GMVJ823	M.RESISTOR CH 1/10W 82K	1	
R4006	ERJ6GMVJ273	M.RESISTOR CH 1/10W 27K	1	
R4007	ERJ6GMVJ683	M.RESISTOR CH 1/10W 68K	1	
R4008	ERJ6GMVJ823	M.RESISTOR CH 1/10W 82K	1	
R4009	ERJ6GMVJ100	M.RESISTOR CH 1/10W 10	1	
R4010, 11	ERJ6GMVJ823	M.RESISTOR CH 1/10W 82K	2	
R4012	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R4013	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4014	ERJ6GMVJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4016	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4017	ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R4018	ERJ6GMVJ333	M.RESISTOR CH 1/10W 33K	1	
R4501, 02	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4503	VRE0071E36C	M.RESISTOR CH 1/10W	1	
R4504, 05	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4506, 07	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509	VRE0071E622	M.RESISTOR CH 1/10W	1	
R4511	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4513	ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4518, 19	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	2	
R4522	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527	VRE0071E333	M.RESISTOR CH 1/10W	1	
R4528	VRE0071E153	M.RESISTOR CH 1/10W	1	
R4529	ERJ3GEYC562	M.RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4535	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4542	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551, 52	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553, 54	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558	ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561	ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562	VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R4563	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568, 69	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4578	VRE0071E473	M.RESISTOR CH 1/10W	1	
R4581	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4585	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R4586	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4587, 88	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596	ERJ3GEYG473	M.RESISTOR CH 1/16W 47K	1	
R4597	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598, 99	ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603	ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606	VRE0071E562	M.RESISTOR	1	
R4610	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612	VRE0071E331	M.RESISTOR CH 1/10W	1	
R4613	ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615	VRE0071E133	M.RESISTOR CH 1/10W	1	
R4616	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4649	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4653	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R4656	ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4670	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R4671	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R6001	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R6002	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6004	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	1	
R6005-07	ERJ6GMVJ333	M.RESISTOR CH 1/10W 33K	3	
R6008	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009-11	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	3	
R6012	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6013	EROS2CIG2000	M.RESISTOR 1/4W 200	1	
R6014, 15	ERJ6GMVJ223	M.RESISTOR CH 1/10W 22K	2	
R6016	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R6017	ERJ6GMVJ271	M.RESISTOR CH 1/10W 270	1	
R6018	ERJ6GMVJ683	M.RESISTOR CH 1/10W 68K	1	
R6019	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R6020	ERJ6GMVJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6021	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R6022	ERJ6GMVJ101	M.RESISTOR CH 1/10W 100	1	
R6023	ERJ6GMVJ104	M.RESISTOR CH 1/10W 100K	1	
R6024-29	ERJ6GMVJ102	M.RESISTOR CH 1/10W 1K	6	
R6030, 31	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	2	
R6032, 33	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6034, 35	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	2	
R6036	ERJ6GMVJ104	M.RESISTOR CH 1/10W 100K	1	
R6037	ERJ6GMVJ224	M.RESISTOR CH 1/10W 220K	1	
R6038	ERJ6GMVJ223	M.RESISTOR CH 1/10W 22K	1	
R6039	ERJ6GMVJ183	M.RESISTOR CH 1/10W 18K	1	
R6040	ERJ6GMVJ333	M.RESISTOR CH 1/10W 33K	1	
R6042	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1	
R6043	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6044	ERJ6GMVJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6048	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6049	ERJ6GMVJ152	M.RESISTOR CH 1/10W 1.5K	1	
R6050	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6051	ERJ6GMVJ472	M.RESISTOR CH 1/10W 4.7K	1	
R7001, 02	ERJ6GMVJ151	M.RESISTOR CH 1/10W 150	2	
R7302	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7303	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R7304	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7305	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R7306	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7307	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7308	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7309	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310	ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R7311	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R7312	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R7313	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMA8089	MAIN HOLDER	1	
	VEP05176C	HEAD AMP C.B.A.		(RTL)
C503	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
C505-08	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	4	
C509	ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C510,11	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C512	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C513	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C514	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C515,16	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C517,18	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C519,20	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C521	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C523-25	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C526	VECA0JAC221	E.CAPACITOR 6.3V 220U	1	
C527	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C540	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C551	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C552-54	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C555	ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C556,57	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C559	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
C560,61	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C562,63	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C564	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
C565	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C566	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C567	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C569	ECUM1C1052FN	C.CAPACITOR CH 16V 1U	1	
IC501	AN3336SB	IC	1	
IC551	BA7743FS	IC	1	
L501,02	VLQ0540K330	COIL 33UH	2	
L551,52	VLQ0540K330	COIL 33UH	2	
P501	VJS3537B020G	CONNECTOR (FEMALE) 20P	1	
P502	VJS2603	CONNECTOR (FEMALE)	1	
QR501	MRN2404	TRANSISTOR-RESISTOR	1	
R501	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R502	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R503	ERJ6GMYG752	M.RESISTOR CH 1/10W 7.5K	1	
R504	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R505	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R506	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R507	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R508	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R509-12	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	4	
R513	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R514	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270K	1	
R517	ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R526	ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R551	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R552	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R553	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R554	ERJ6GMYJ243	M.RESISTOR CH 1/10W 24K	1	
R556	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R557	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R558	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R559,60	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R561	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R562	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R563	VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R564	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R565	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R566	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R567	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R568	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R569	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R570	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
		MISCELLANEOUS		
	VSC3714	SHILED COVER (TOP)	1	
	VSC3478	SHILED COVER (MAIN)	1	
	VSC3715	SHILED COVER (BOTTOM)	1	
	VEP06931B	OPERATION C.B.A.		(RTL)
D6501,02	1SS254	DIODE	2	
PS6501	VJS3405A009A	CONNECTOR (FEMALE) 9P	1	
SW6501,02	EVQ11409K	SWITCH	2	
	VEP07675C	NICAM RECORDER C.B.A.		(RTL) NV-HD77AM
C7901-03	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	3	
C7904	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7905	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7906	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7907	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7908	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7909	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7910	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7911-13	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	3	
C7914	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7915	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7916	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7917	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7918	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7919	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7920	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7921	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7922	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7923	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7924	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7925	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7926	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7927	ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7928	ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7929	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7930	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7931	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7932,33	ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C7934	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7935	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C7937	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7938	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C7939,40	ECEA1HKNR01	E.CAPACITOR 50V 0.1U	2	
C7941	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C7942	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7943	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7945	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C7946	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7947	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C7948	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7949	ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7950-53	ECEA1CKN100	E.CAPACITOR 16V 10U	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7954	ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7955-60	ECEA1CK100	E.CAPACITOR 16V 10U	6	
C7961	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7963	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	1	
C7964	ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7965,66	ECUX1H1032FV	C.CAPACITOR CH 50V 0.01U	2	
C7967	ECEA1CK100	E.CAPACITOR 16V 10U	1	
D7901-03	MA141WK	DIODE	3	
D7904	MA141K	DIODE	1	
D7905	MA141WA	DIODE	1	
D7906	MA141WK	DIODE	1	
D7907	MA141K	DIODE	1	
FL7901	VLF0703	FILTER	1	
FL7902	ELKAW103EB	FILTER	1	
FL7904-11	ELKAW103EB	FILTER	8	
FL7912-15	ELKAW101GB	FILTER	4	
FL7916	VLF0633	FILTER	1	
FL7918	ELKAW103EB	FILTER	1	
IC7901	TB1204F	IC	1	
IC7902	TA2009F	IC	1	
IC7903	M5238FP	IC	1	
L7901,02	VLF0083	COIL	2	
P7901	VJP1237R	CONNECTOR (MALE) 10P	1	
P7902	VJP1237T	CONNECTOR (MALE) 10P	1	
Q7901,02	MSD601	TRANSISTOR	2	
Q7903	2SC3931CD	TRANSISTOR	1	
Q7904-07	2SB1219	TRANSISTOR	4	
Q7908,09	2SC3929	TRANSISTOR	2	
Q7910,11	2SD1820	TRANSISTOR	2	
Q7912	2SB1219	TRANSISTOR	1	
Q7913	2SB1218-Q	TRANSISTOR	1	
Q7914,15	2SD1979-S	TRANSISTOR	2	
Q7916,17	2SB1219	TRANSISTOR	2	
QR7901,02	UN5213	TRANSISTOR-RESISTOR	2	
QR7903	UN5112	TRANSISTOR-RESISTOR	1	
QR7904	UN5214	TRANSISTOR-RESISTOR	1	
QR7905,06	UN5213	TRANSISTOR-RESISTOR	2	
R7901	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7902	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R7903	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7904	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7905	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7906	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7907	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7908	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7909-12	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	4	
R7913-15	ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	3	
R7917	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R7918-21	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R7922	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7923	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7924-26	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7927	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7928	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R7929	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7930	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R7931-33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R7934	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7935	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7936	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R7937	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7938	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7939	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R7940	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R7941	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R7942	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R7943	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R7944	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R7945	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7946,47	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R7948	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7949	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7950	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7951,52	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	2	
R7953	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7954,55	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7956	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R7957	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R7958,59	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	2	
R7960,61	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R7964	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7965-72	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
R7973-77	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
R7978	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7979	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R7980	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R7981,82	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7983,84	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7985,86	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	2	
R7987	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R7988	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R7989	ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
VR7901,02	EVNCBAA00B14	V.RESISTOR	2	
VR7903	EVTEASA00B55	V.RESISTOR	1	
X7901	VXS0514	CRYSTAL OSCILLATOR	1	
X7902	VXS0512	CRYSTAL OSCILLATOR	1	
X7903	EP0A5504BF	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC3553	SHIELD COVER (MAIN)	1	
	VSC3554	SHIELD COVER (TOP)	1	
	VSC3555	SHIELD COVER (BOTTOM)	1	
	VEP07752N	TIMER C.B.A.		(RTL)NV-HD70AM
C1701	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C1703	ECMD2H471KB	E.CAPACITOR 500V 470P	1	
C1704	ECEA1VKA220	E.CAPACITOR 35V 22U	1	
C1705	ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
C1706	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1707	ECEA0JK221	E.CAPACITOR 6.3V 220	1	
C1708	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7501	ECRHA030E54R	V.CAPACITOR	1	
C7502	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7503	ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7504	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C7505	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7506	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7507,08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C7509	ERJ6GM20R00	M.RESISTOR 1/10W 0	1	
C7510	ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C7511	EECS5R5T473	C.CAPACITOR 5.5V 0.047F	1	
C7513	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7514	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7517,18	ECEA0JKS470	E.CAPACITOR 6.3V 47U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C7519	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7522	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7523	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
D1701	MA1270-H	DIODE	1	
D1702	1SS254	DIODE	1	
D1703	11EQS04	DIODE	1	
D7501	MA3075	DIODE	1	
D7506-08	MA221	DIODE	3	
D7517	MA221	DIODE	1	
D7519,20	MA221	DIODE	2	
D7523-31	1SS254	DIODE	9	
D7534-36	LN81RCPHJLS	DIODE	3	
D7538	LN81RCPHJLS	DIODE	1	
D7543,44	1SS254	DIODE	2	
D7546,47	1SS254	DIODE	2	
D7549	1SS254	DIODE	1	
DP7501	VSL0316	DISPLAY TUBE	1	
IC7501	MN187164VZCB	IC	1	
IC7502	PST7026	IC	1	
IC7503	M6M80011AP	IC	1	
IC7504	PST7043	IC	1	
IR7501	VEK6407	IR RECEIVER UNIT	1	
L1701	VLQ0599J680	COIL	1	
L7501	VLQ0599J101	COIL 100UH	1	
P7501	VJS3537B025G	CONNECTOR (FEMALE) 25P	1	
P7502	VJS3537B012G	CONNECTOR (FEMALE) 12P	1	
PP7501	VJP3405A009W	CONNECTOR (MALE) 9P	1	
Q1701	ZSD973A-R	TRANSISTOR	1	
Q7501	ZSD1996	TRANSISTOR	1	
Q7502	MSB710	TRANSISTOR	1	
QR7501,02	MRN2402	TRANSISTOR-RESISTOR	2	
QR7503-05	MRN1404	TRANSISTOR-RESISTOR	3	
QR7508	MRN1407	TRANSISTOR-RESISTOR	1	
R1701	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	BRDS2TJ471	C.RESISTOR 1/4W 470	1	
R1703	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R1704	ERJ6GM20R00	M.RESISTOR 1/10W 0	1	
R7501	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R7502	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R7503,04	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	2	
R7505	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7506	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7507	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R7508	ERJ6GMJ224	M.RESISTOR CH 1/10W 220K	1	
R7510	ERJ6GMJ181	M.RESISTOR CH 1/10W 180	1	
R7511	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7512	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R7514	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7515-18	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	4	
R7519-23	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	5	
R7524,25	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R7526,27	ERJ6GMJ333	M.RESISTOR CH 1/10W 33K	2	
R7530-35	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	6	
R7536	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7537	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R7538	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R7540	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R7541,42	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	2	
SW7501-06	EVQ11409K	SWITCH	6	
SW7508-14	EVQ11409K	SWITCH	7	
SW7516	ESD172352	SWITCH	1	
SW7517	ESD172252	SWITCH	1	
SW7518	EVQ11409K	SWITCH	1	
T1701	ETE13K80AY	TRANSFORMER	1	
X7501	VSX0608	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VJF1096	FIP HOLDER	1	
	VMD0504	LED HOLDER	4	
	VEP07752Q	TIMER C.B.A.		(RTL)NV-HD77AM
C1701	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C1703	ECKD2H471KB	E.CAPACITOR 500V 470P	1	
C1704	ECEA1VIA220	E.CAPACITOR 35V 22U	1	
C1705	ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
C1706	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1707	ECEAQJK221	E.CAPACITOR 6.3V 220	1	
C1708	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7501	ECRHA030E54R	V.CAPACITOR	1	
C7502	ECEAQJKA221	E.CAPACITOR 6.3V 220U	1	
C7503	ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7504	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C7505	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C7506	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7507,08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C7509	ERJ6GM20R00	M.RESISTOR 1/10W 0	1	
C7510	ECNOJM471	E.CAPACITOR 6.3V 470U	1	
C7511	EECS5R5T473	C.CAPACITOR 5.5V 0.047F	1	
C7513	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C7514	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C7517,18	ECEAQJKA470	E.CAPACITOR 6.3V 47U	2	
C7519	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7522	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C7523	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
D1701	MA1270-H	DIODE	1	
D1702	1SS254	DIODE	1	
D1703	11EQS04	DIODE	1	
D7501	MA3075	DIODE	1	
D7506-08	MA221	DIODE	3	
D7517	MA221	DIODE	1	
D7519,20	MA221	DIODE	2	
D7523-31	1SS254	DIODE	9	
D7534-38	LN81RCPHJLS	DIODE	5	
D7543,44	1SS254	DIODE	2	
D7546,47	1SS254	DIODE	2	
D7549	1SS254	DIODE	1	
DP7501	VSL0316	DISPLAY TUBE	1	
IC7501	MN187164VZCB	IC	1	
IC7502	PST7026	IC	1	
IC7503	M6M80011AP	IC	1	
IC7504	PST7043	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IR7501	VEK6407	IR RECEIVER UNIT	1		C1701	ECEA1CKA101	E.CAPACITOR 16V 100U	1	
					C1702	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
					C1703	ECID2H4711KB	E.CAPACITOR 500V 470P	1	
L1701	VLQ0599J680	COIL	1		C1704	ECEA1VKQ220	E.CAPACITOR 35V 22U	1	
L7501	VLQ0599J101	COIL 100UH	1		C1705	ECKF1H1032F	C.CAPACITOR 50V 0.01U	1	
					C1706	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
					C1707	ECEAOJK221	E.CAPACITOR 6.3V 220	1	
P7501	VJS3537B025G	CONNECTOR (FEMALE) 25P	1		C1708	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
P7502	VJS3537B012G	CONNECTOR (FEMALE) 12P	1		C7501	ECRHA030E54R	V.CAPACITOR	1	
					C7502	ECEAOJKA221	E.CAPACITOR 6.3V 220U	1	
					C7503	ECEA1HKQ220	E.CAPACITOR 50V 22U	1	
PP7501	VJP3405A009W	CONNECTOR (MALE) 9P	1		C7504	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
					C7505	ECUM1H100DKN	C.CAPACITOR CH 50V 10P	1	
					C7506	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
Q1701	2SD973A-R	TRANSISTOR	1		C7507,08	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
Q7501	2SD1996	TRANSISTOR	1		C7509	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
Q7502	MSB710	TRANSISTOR	1		C7510	ECRAJMA471	E.CAPACITOR 6.3V 470U	1	
					C7511	EECSSR5V104N	C.CAPACITOR	1	
QR7501,02	MRN2402	TRANSISTOR-RESISTOR	2		C7513	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
QR7503-05	MRN1404	TRANSISTOR-RESISTOR	3		C7514	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
QR7508	MRN1407	TRANSISTOR-RESISTOR	1		C7517,18	ECEAOJKS470	E.CAPACITOR 6.3V 47U	2	
					C7519	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
					C7522	ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
					C7523	ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
R1701	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1						
R1702	ERDS2TJ471	C.RESISTOR 1/4W 470	1		D1701	MA1270-H	DIODE	1	
R1703	ERJ6GMVJ101	M.RESISTOR CH 1/10W 100	1		D1702	1SS254	DIODE	1	
R1704	ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1		D1703	11EQS04	DIODE	1	
R7501	ERJ6GMVJ104	M.RESISTOR CH 1/10W 100K	1		D7501	MA3075	DIODE	1	
R7502	ERJ6GMVJ101	M.RESISTOR CH 1/10W 100	1		D7502	MA221	DIODE	1	
R7503,04	ERJ6GMVJ391	M.RESISTOR CH 1/10W 390	2		D7506,07	MA221	DIODE	2	
R7505	ERJ6GMVJ272	M.RESISTOR CH 1/10W 2.7K	1		D7517	MA221	DIODE	1	
R7506	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1		D7519-21	MA221	DIODE	3	
R7507	ERJ6GMVJ471	M.RESISTOR CH 1/10W 470	1		D7523-31	1SS254	DIODE	9	
R7508	ERJ6GMVJ224	M.RESISTOR CH 1/10W 220K	1		D7534-36	LN81RCPLJULS	DIODE	3	
R7510	ERJ6GMVJ181	M.RESISTOR CH 1/10W 180	1		D7538	LN81RCPLJULS	DIODE	1	
R7511	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1		D7549	1SS254	DIODE	1	
R7512	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	1						
R7514	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1						
R7515-18	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	4		DP7501	VSL0316	DISPLAY TUBE	1	
R7519-23	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	5						
R7524,25	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	2		IC7501	MN187164V2CB	IC	1	
R7526,27	ERJ6GMVJ333	M.RESISTOR CH 1/10W 33K	2		IC7502	PST7026	IC	1	
R7530-35	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	6		IC7503	M6M80011AP	IC	1	
R7536	ERJ6GMVJ332	M.RESISTOR CH 1/10W 3.3K	1		IC7504	PST7043	IC	1	
R7537	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1						
R7538	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	1						
R7540	ERJ6GMVJ103	M.RESISTOR CH 1/10W 10K	1						
R7541,42	ERJ6GMVJ221	M.RESISTOR CH 1/10W 220	2						
					IR7501	VEK6407	IR RECEIVER UNIT	1	
SW7501-06	EVQ11409K	SWITCH	6						
SW7508-14	EVQ11409K	SWITCH	7		L1701	VLQ0599J680	COIL	1	
SW7515	ESD172252	SWITCH	1		L7501	VLQ0599J101	COIL 100UH	1	
SW7516	ESD172352	SWITCH	1						
SW7517	ESD172252	SWITCH	1						
SW7518	EVQ11409K	SWITCH	1						
T1701	ETE13R80AY	SWITCH	1						
X7501	VXK0608	CRYSTAL OSCILLATOR	1						
X7502	VXK0094	CRYSTAL OSCILLATOR	1						
		MISCELLANEOUS							
	VJF1096	FIP HOLDER	1						
	VMD0504	LED HOLDER	5						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1701	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1702	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R1703	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R1704	ERJ6GMZ0R00	M.RESISTOR 1/10W 0	1	
R7501	ERJ6GMJ104	M.RESISTOR CH 1/10W 100K	1	
R7502	ERJ6GMJ101	M.RESISTOR CH 1/10W 100	1	
R7503,04	ERJ6GMJ391	M.RESISTOR CH 1/10W 390	2	
R7505	ERJ6GMJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7506	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7507	ERJ6GMJ471	M.RESISTOR CH 1/10W 470	1	
R7508	ERJ6GMJ224	M.RESISTOR CH 1/10W 220K	1	
R7509	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R7510	ERJ6GMJ181	M.RESISTOR CH 1/10W 180	1	
R7511	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7512	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R7514	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7515-18	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	4	
R7519-23	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	5	
R7524,25	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	2	
R7529-35	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	7	
R7536	ERJ6GMJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7537	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R7538	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	1	
R7540	ERJ6GMJ103	M.RESISTOR CH 1/10W 10K	1	
R7541,42	ERJ6GMJ221	M.RESISTOR CH 1/10W 220	2	
SW7501-06	EVQ11409K	SWITCH	6	
SW7508-14	EVQ11409K	SWITCH	7	
SW7518	EVQ11409K	SWITCH	1	
T1701	ETE13K80AY	TRANSFORMER	1	
X7501	VSX0608	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VJF1096	FIP HOLDER	1	
	VMD0504	LED HOLDER	4	
	VEP01587F	POWER C.B.A.		(RTL) <1>
				NV-HD70NM/HD77AM
C1103	VCC0019	C.CAPACITOR 330P	1	<1>
C1106	VCC0019	C.CAPACITOR 330P	1	<1>
C1109	VCC0022	C.CAPACITOR 1000P	1	
C1111	ECQU2A333MNB	P.CAPACITOR 250V 0.033U	1	<1>
C1112	ECCE2GG680	E.CAPACITOR 400V 68U	1	
C1113	ECQ6E473KF	P.CAPACITOR 50V	1	
C1114	VCK0106K121	C.CAPACITOR	1	
C1115	ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1116	EEUFA1E681	C.CAPACITOR	1	
C1117	ECEA1DF2681	E.CAPACITOR 20V 680U	1	
C1118,19	ECEA1AF2681X	E.CAPACITOR 10V 680U	2	
C1121	ECCD2H101J	C.CAPACITOR 500V 100P	1	
C1122	ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C1123	ECALVXLV470	E.CAPACITOR 35V 47U	1	
C1124	ECKFH271KB	E.CAPACITOR 50V 270U	1	
C1125	ECKFH102KB	C.CAPACITOR 50V 1000P	1	
C1126	ECAGXLV331	E.CAPACITOR 4V 330	1	
C1127	ECALCPQ121	E.CAPACITOR 16V 120U	1	
C1128	ECALCE101	E.CAPACITOR 16V 100U	1	
C1129	ECKFH1032F	C.CAPACITOR 50V 0.01U	1	
C1130	ECKFH1022F	C.CAPACITOR 50V 1000P	1	
D1101	ENB461D-05A	SURGE ABSORBER 460V	1	<1>
D1102	S1WBA60S	DIODE	1	<1>
D1103	AP01C	DIODE	1	
D1104	10ELS2	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1105	RL4Z	DIODE	1	
D1106	31DQ04	DIODE	1	
D1107	MA185	DIODE	1	
D1108	MA178	DIODE	1	
D1109	MA723VT	DIODE	1	
D1110	MA4200H	DIODE	1	
D1111	MA185	DIODE	1	
IC1101	HA17431PA	IC	1	
IC1102	STRM6559LF	IC	1	<1>
L1102	ELF18D290A	COIL 29UH	1	<1>
L1109,10	VLQ0611K220	COIL H	2	
L1111,12	ELESE101KA	COIL 100UH	2	
L1114	VLP0074	COIL	1	
P1101	VJS2625	AC INLET	1	<1>
P1102	VJS3537B010G	CONNECTOR (FEMALE) 10P	1	
Q1101	PC120F	TRANSISTOR	1	<1>
Q1102	2SD2375	TRANSISTOR	1	
Q1103	2SD1991	TRANSISTOR	1	
QR1101	UN4213	TRANSISTOR-RESISTOR	1	
R1104	ERG3SJ683	M.RESISTOR 1/16W 68K	1	
R1105	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R1106	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1107	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1108	EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1109	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R1110	EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1111	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R1112	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R1113	ERDS2FJ101	C.RESISTOR 1/4W 100	1	
R1114	ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1115,16	ERDS2FJ224	C.RESISTOR 1/4W 220K	2	
R1117	ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1118	ERDS2FJ471	C.RESISTOR 1/4W 470	1	
R1119	ERDS2FJ152	C.RESISTOR 1/4W 1.5K	1	
R1120	ERDS1TJ395	C.RESISTOR 1/2W 3.9M	1	
R1121	ERDS1TJ475	C.RESISTOR 1/2W 4.7M	1	
R1122	ERX1SJR82	M.RESISTOR 1W 0.82	1	
R1123	ERDS2FJ391	C.RESISTOR 1/4W 390	1	
R1124	ERDS2FJ224	C.RESISTOR 1/4W 220K	1	
R1125	ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1126	EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1127	EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
T1101	VLTO704	TRANSFORMER	1	<1>
		MISCELLANEOUS		
	EYF52BC	FUSE HOLDER	2	<1>
	VMZ2212	CAPACITOR COVER	2	<1>
	VEP01587D	POWER C.B.A.		(RTL) <1>
				NV-HD90EE
C1103	VCC0021	C.CAPACITOR	1	<1>
C1106	VCC0021	C.CAPACITOR	1	<1>
C1109	VCC0022	C.CAPACITOR 1000P	1	<1>
C1110	ECQU2A563MNB	P.CAPACITOR 250V 0.056U	1	<1>
C1111	ECQU2A333MNB	P.CAPACITOR 250V 0.033U	1	<1>
C1112	ECCE2GG330	E.CAPACITOR 400V 33P	1	
C1113	ECQ6E473KF	P.CAPACITOR 50V	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1114	VCK0106K121	C.CAPACITOR	1	
C1115	ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1116	EEUFA1E681	C.CAPACITOR	1	
C1117	ECEA1DFZ681	E.CAPACITOR 20V 68OU	1	
C1118, 19	ECEA1AFZ681X	E.CAPACITOR 10V 68OU	2	
C1121	ECCD2H1O1J	C.CAPACITOR 500V 100P	1	
C1122	ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C1123	ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1124	ECKF1H271KB	E.CAPACITOR 50V 27OU	1	
C1125	ECKF1H102KB	C.CAPACITOR 50V 100OP	1	
C1126	ECAOGXLV331	E.CAPACITOR 4V 33O	1	
C1127	ECA1CFQ121	E.CAPACITOR 16V 12OU	1	
C1128	ECA1CGE101	E.CAPACITOR 16V 10OU	1	
C1129	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1130	ECKF1H102ZF	C.CAPACITOR 50V 100OP	1	
D1102	S1WBA60S	DIODE	1	<I>
D1103	AP01C	DIODE	1	
D1104	10ELS2	DIODE	1	
D1105	RL4Z	DIODE	1	
D1106	31DQ04	DIODE	1	
D1107	MA185	DIODE	1	
D1108	MA178	DIODE	1	
D1109	MA723VT	DIODE	1	
D1110	MA420OH	DIODE	1	
D1111	MA185	DIODE	1	
IC1101	HA17431PA	IC	1	
IC1102	STRM6559LF	IC	1	<I>
L1101, 02	ELF18D221F	COIL	2	<I>
L1109, 10	VLQ0611K220	COIL H	2	
L1111, 12	ELESE101KA	COIL 100UH	2	
L1114	VLP0074	COIL	1	
P1101	WJS2625	AC INLET	1	<I>
P1102	WJS3537B01OG	CONNECTOR (FEMALE) 10P	1	
Q1101	PC120F	TRANSISTOR	1	<I>
Q1102	2SD2375	TRANSISTOR	1	
Q1103	2SD1991	TRANSISTOR	1	
QR1101	UN4213	TRANSISTOR-RESISTOR	1	
R1104	ERG3SJ683	M.RESISTOR 1/16W 68K	1	
R1105	ERDS2TJ561	C.RESISTOR 1/4W 56O	1	
R1106	ERDS2TJ271	C.RESISTOR 1/4W 27O	1	
R1107	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R1108	EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
R1109	ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R1110	EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1111	ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R1112	ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R1113	ERDS2FJ101	C.RESISTOR 1/4W 10O	1	
R1114	ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1115, 16	ERDS2FJ224	C.RESISTOR 1/4W 22OK	2	
R1117	ERDS2FJ221	C.RESISTOR 1/4W 22O	1	
R1118	ERDS2FJ471	C.RESISTOR 1/4W 47O	1	
R1119	ERDS2FJ152	C.RESISTOR 1/4W 1.5K	1	
R1120	ERDS1TJ395	C.RESISTOR 1/2W 3.9M	1	
R1121	ERDS1TJ475	C.RESISTOR 1/2W 4.7M	1	
R1122	ERX1SJR82	M.RESISTOR 1W 0.82	1	
R1123	ERDS2FJ471	C.RESISTOR 1/4W 47O	1	
R1124	ERDS2FJ224	C.RESISTOR 1/4W 22OK	1	
R1125	ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1126	EROS2CKG2701	M.RESISTOR 1/4W 2.7K	1	
R1127	EROS2CKG2401	M.RESISTOR 1/4W 2.4K	1	
T1101	VLTO704	TRANSFORMER	1	<I>
		MISCELLANEOUS		
	EYP52BC	FUSE HOLDER	2	<I>
	VHZ2212	CAPACITOR COVER	3	<I>
		MECHANISM CONNECTION C.B.A.		(RTL)
D1501	LN59L.VT	IC	1	
IC1501, 02	ON1387	IC	2	
P1503	WJS3316A002	CONNECTOR (FEMALE) 2P	1	
P1504	WJS3317A004	CONNECTOR (FEMALE) 4P	1	
P1505	WJS3193B013A	CONNECTOR (FEMALE) 13P	1	
Q1501, 02	PN205L-NC.VT	TRANSISTOR	2	
SW1501	VES0695	SAFETY SWITCH	1	
		MISCELLANEOUS		
	VMD2029	REEL GUIDE	1	
		MOTOR C.B.A.		(RTL)
		MISCELLANEOUS		
	VJP3316B002	CONNECTOR (MALE) 2P	1	

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.

Do not order any parts according to these codes.

P. C. B.	F I L M C O D E
MAIN	HOA001-03A88
LUMINANCE & CHROMINANCE	HOA000-03975
NTSC REC(NV-HD70AM/HD77AM)	HOA002-03888
DDR SECAM(NV-HD90EE)	HOA000-03A02
POWER	HOA000-01587
SYUGO (TIMER/OPERATION)	HOA002-0243A
TV DEMODULATOR(70AM/77AM)	HOA000-07723
TV DEMODULATOR(NV-HD90EE)	HOA001-07645
NICAM DECORDER(NV-HD77AM)	HOA000-07675
DECORDER(NV-HD70AM/HD77AM)	HOA000-07725
DECORDER(NV-HD90EE)	HOA000-07743
HEAD AMP	HOA004-05176
HI-FI AUDIO	HOA000-04447
MECHANISM CONNECTION	HOA000-00S63
CYLINDER DRIVE	HOA002-00R99
LOADING MOTOR	HOA000-00S75

Panasonic
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